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We Are Often Asked

to distribute circulars and price-lists through *THE CHEMIST AND DRUGGIST*, and we make an effective response twice a year. The first occasion in 1902 will be January 25, and as we shall be closing for press four or five days before that, those who wish to give us insets should acquaint the Publisher of the *C. & D.* about the matter at once. There is little time to lose. If any find difficulty in getting the printing done they also should write to the Publisher, as he can give assistance in such circumstances. In all cases it is wise for business houses to insert effective announcements in our Winter Issue. It will be a good one in every way for business, as it will be circulated to 12,000 of the best buyers of druggists' goods in the world.

Summary.

NEW STORE-PRICES are quoted on p. 35.

SMALLPOX is rapidly increasing in London (p. 35).

MR. CHARLES SANGER is sketched in a peculiar position on p. 46.

FURTHER particulars of the trial of Mr. W. H. Kerr are given on p. 37.

DR. ALABONE disclaims his son's account of consumption-treatment (p. 50).

THE names of the winners in the "Nipper" cameras' competitions are printed on p. 56.

MR. PETER J. DEWAR, a well-known Scottish pharmacist, died in Dingwall last week (p. 54).

QUEENSLAND has got a Pharmacy Act in which pharmacy companies are dealt with (p. 39).

SOME points in regard to liability of labels to medicine-stamp duty are mentioned on pp. 57 and 58.

INTERESTING ABSTRACTS of the patent specifications most recently published are printed on p. 67.

THE Chemists' Managers' and Assistants' Society has started on its new career with some *éclat* (p. 54).

COINS AND STAMPS with King Edward's effigy on them are now available. We illustrate the coin (p. 68).

The largest arsenic-mine in Devon has been closed. The effect of this on the market is discussed on p. 49.

CONSIDERABLE changes have been made in the Australian Federal tariff. We give particulars on p. 46.

THE PHARMACEUTICAL COUNCIL (G.B.) met on Wednesday, but there was no unusual business to transact (p. 41).

A CHAIN for the badge worn by the President of the Pharmaceutical Society was presented on Wednesday (p. 43).

THE PERFUMERY-TRADE of the world has been inquired into by the French Government with some peculiar results (p. 38).

WHAT is opodeldoo? The question is put by a correspondent who finds that some Scotch chemists give lin. opii for it (p. 53).

CHROMATIC PHOTOGRAPHY was the subject at the Newcastle Chemists' Association meeting this week, Mr. Payne dealing with it (p. 55).

WE give the conditions of the competition for the National Consumption Sanatorium for which Sir E. Cassel has donated 200,000*l.* (p. 51).

THE new Kodak terms have brought wholesale dealers together. We note what they are doing, and what the Kodak Company say (p. 56).

DR. HEWITT, of the People's Palace, proposes to remove aldehydes from whisky by sodium phenyl-hydrazine sulphonate, so maturing it as well as by age (p. 50 and p. 54).

THE French Government desires to encourage the distillation of otto of rose in France, and has made inquiry about it. We deal with the matter in an article on p. 49.

MR. DREW, the Kensington Coroner, has severely cross-examined a deceased chemist's son in regard to the sale of a child's cough-mixture that contained paregoric (p. 34).

A JOINT COMMITTEE of the Society of Chemical Industry and the Society of Public Analysts have reported upon the testing of food for arsenic. We epitomise their statements on p. 54.

MR. LORD GIFFORD figures well in this number. He spoke at the Council on Wednesday (p. 42); "Xrayser" refers to him (p. 47); he drops into an editorial note (p. 48); and correspondents write about him (p. 57).

DR. BALFOUR MARSHALL has reported on the Pharmaceutical examinations in Edinburgh during 1901, saying that the 10-guinea fee has helped to raise the passes (p. 41); but we note this has not happened this month, as the list on p. 43 shows.

THE CHIEF BUSINESS that the Irish Pharmaceutical Council had before it on New Year's Day was provided in Sir G. Duffey's report on the examinations. He recommends the Preliminary to be divided, as it is too long. A committee is to consider the matter (p. 66).

THE PRINCIPAL EVENT on the market has been a substantial reduction in lithia salts. Pilocarpine and eserine have been advanced. Quicksilver is 2s. 6*d.* lower, but mercurials are unaltered. Morphine is 1*d.* lower. Both nitrate of soda and ammonia sulphate are dearer. The first drug-sales of the year are reported on p. 62.

English News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Brevities.

The new Patent Office in Quality Court, Chancery Lane, W.C., was this week opened to the public. The building has taken three years to construct.

On January 3, a fire broke out on the premises of Mr. F. G. Brice, chemist, Humberstone Road, Leicester, but owing to the promptitude of the fire brigade the flames were subdued before much damage was done.

Mr. John Crosfield, late senior partner of the firm of J. Crosfield & Sons (Limited), Warrington, whose death we reported in last week's issue, has bequeathed a legacy of £1,000 to the Warrington Infirmary and Dispensary.

At Liverpool on January 3, a firm of shipping agents were fined 20s. and costs for having caused 1½ tons of picric acid to be brought within the jurisdiction of the Mersey Docks and Harbour Board without having special permission in writing.

The *Zoophilist* mentions that the Secretary of the National Antivivisection Society is in correspondence with the Home Secretary regarding the lecture with physiological experiments delivered by Professor Sherrington to the Liverpool Chemists' Association recently.

Henry James Goode, described as a druggist, of 58 York Road, London (but whose name does not appear on the Register of Chemists and Druggists), was fined 5l. and 1l. 17s. 6d. costs, or one month, by the Lutterworth Justices for posting and delivering an indecent advertisement in the district.

William Hall, *alias* Trythall, who is at present in Lancaster Castle awaiting trial on charges of forgery at Barrow, was on January 3, under instructions from the Home Secretary, committed for trial on the further charge of forging a cheque for 5l. in the name of Arthur Davis, dry-salter, Bramley, Leeds.

William Fairs, described as a chemist and dentist, of Old Ford Road, E., was fined 20s. and 23s. costs, at Worship Street Police Court, on January 2, for selling lime-water which on analysis was found to be deficient in lime to the extent of 20 per cent., and also to be prepared with ordinary instead of distilled water.

A circular issued by the Secretary of the Decimal Association (Mr. Edward Johnson) gives the names of 173 members of Parliament who have promised to support the introduction of the metric weights and measures into Great Britain. The circular urges the adoption of the system principally in the interests of our foreign trade.

At the annual dinner of the Derwent Agricultural Club on January 1, the Lord Mayor of York suggested that the Government might with advantage to the agriculturists of this country either take ½d. per lb. off the duty on English-grown chicory or put ½d. per lb. on the foreign-grown article. This would enable the cultivation of chicory, which was at one time largely carried on in the vicinity of York, to be again made profitable.

Malcolm Brooke Campbell (26), described as a book-keeper, has been committed for trial at Marylebone Police Court on charges of embezzling various sums belonging to his employer, Charles Peirce, veterinary surgeon, and of forging and uttering two cheques, each for 5l., with intent to defraud Mrs. Sarah Adams (the wife of Mr. A. H. Adams, chemist and druggist, 21 Formosa Street, Maida Vale, W.) and a firewood-merchant in Amberley Road, W.

On Wednesday, January 8, at the Burnley Borough Police Court, Mr. Jesse Tomlinson, chemist, was fined 10s. and costs for selling camphorated oil which the Borough Analyst reported to be deficient in camphor to the extent of at least 36 per cent. Defendant said the offence would not have occurred had he been in the shop, pointing out that a mistake had been made. A similar penalty was at the same time imposed on a medical herbalist, who sold sweet spirit of nitre 88 per cent. deficient in ethyl nitrite.

The Coroner and the Cough-mixture.

At the Kensington Coroner's Court on January 4, Mr. C. Luxmoore Drew and a jury inquired into the death of Arthur Chapman, aged 2 years and 4 months, son of a Notting Hill carman. The mother said the child had a little cough, and as she did not think it serious she got 2d. of cough-mixture from a chemist. The child died next day. Witness produced the bottle in which she received the mixture. It bore a white label—

Cough-mixture.—Slack's Drug Stores, Walmer Pharmacy, 142 Walmer Road, Notting Hill.

Alfred John Slack said he resided at 142 Walmer Road, and was a chemist's assistant. He was not registered, and did not sell scheduled poisons. The following cross-examination then took place:—

The Coroner: You keep a chemist's shop?—Yes. Did you prescribe for this child?—No; my father prepared a gallon of the mixture a week before he died. He was a chemist. The Coroner: You prescribed this mixture?—No. I do not call it prescribing selling from a stock-mixture already made up. If I prescribed I should make it up there and then. Did the mother say what she wanted?—No. You selected it?—It is a mixture we have been selling for ten years. She asked for 2d. of cough-mixture for a child. Did you ask the age?—No. I gave verbal instructions about the amount to give—a teaspoonful three times a day. What would that teaspoonful contain?—Syrup of squills, 15 drops; paregoric, 1 drop; ipecacuhana wine, 5 drops; essence of peppermint, 2 mins.; and water with colouring-matter to 1 dr.

The Coroner: What does paregoric contain?—A slight proportion of opium, but I am not selling it now.

The Coroner: You transgressed the Pharmacy Act?—Yes; but it contained only a small quantity. That has nothing to do with it. My officer called on you and asked what the mixture you sold the woman contained?—Yes. You gave him a copy of the formula and signed it?—Yes. Why did you write after paregoric "*sine opium*," when you come here and say it did contain opium? It is purely an attempt to deceive me.—I am sorry I made the mistake. What I am selling now is without opium.

The Coroner: Do not you think it a dangerous thing to give opium to a little child?—It does not contain much.

The Coroner: It is a dangerous thing for a person who does not understand diseases to prescribe a mixture containing poison; and you give it in a very lax way. There is no label on the bottle showing it contained poison.

The Witness: Many chemists never do it.

The Coroner: That is no excuse. Why was it not done in this case?

The witness did not answer.

The Coroner: How much would you give to a child 1 month old?—Fifteen drops.

The Coroner: How would they measure it?—I tell them a quarter of a teaspoonful.

Did you enter the sale in a book?—No; I have not got a poisons-book.

The Coroner: You have certainly committed one or two irregularities. You have no poisons-book, you do not label it "Poison," and you as an unregistered chemist have dispensed poison. Do you know the Pharmacy Act?—I have not read it through. My late father was a member of the Society.

Are you acting as his executor?—No; a Mr. Rynall is his executor.

The Coroner pointed out to the witness that he was liable to a fine of 5l. under the Pharmacy Act, and read the section relating to the labelling of poisons.

The Witness: That refers to crude poisons.

The Coroner: No; it refers to poison in any form, and unless you are a registered chemist and druggist it is illegal for you to sell any article containing poison.

The Witness: What I am selling now is paregoric *sine opium*.

The Coroner: Is it made according to the British Pharmacopoeia?

The Witness: No.

Dr. A. T. Nash, of Blenheim Crescent, who was called in after the death, said his autopsy showed that death was due to convulsions from tubercle of the mesentery. Death was not accelerated by the opium in the cough-mixture, but it was dangerous to give to a child. The Coroner, in referring to the evidence, told the jury it was an important case on public grounds, and he should consider whether he should take any further steps in the matter. The jury, however, could only return a verdict of death from natural causes.

Smallpox in London.

Sir J. Crichton Browne, in an address to the Sanitary Inspectors' Association, of which he is President, said that if the present epidemic pursues the usual course it will reach its highest level between January and May. At this season, with a vast holiday migration of Londoners to all parts of the country, it is not impossible, he added, that it may be transplanted to remote districts.

Startling proof of another path of infection has come from Dr. J. C. Thresh, who, in a report to the Essex County Council, enumerates seventy-five cases of smallpox in the districts which his duties as medical officer of health take him to. He finds that infection must have been air-borne from the smallpox ships lying off Purfleet, which is the nearest point to the Essex shore, as there was no personal communication between the patients, friends, and attendants and the Essex shore. Whenever smallpox has been under treatment on the hospital-ships outbreaks have occurred at Orsett, and his theory derives further support from the fact that several cases of smallpox have similarly occurred on the opposite side of the river at Crawford, Darenth, Swanscombe, and Dartford. There are now over 800 cases of smallpox under treatment in the Metropolis.

Store-prices.

The January price-list of the Army and Navy Co-operative Society (Limited) states that the sale of chlorinated lime in 1-lb. tins has been discontinued. The following are "additions":—

Anti-malarial outfit, 15s. complete; Casamen Pridaux, 6d., 1s., and 2s. per box; Copeland's toilet-cream, 10d. per bottle; Coke dandruff-cure, 4s. per bottle; Crown "Bathodora" violet, 2s. 6d. per case; Holland's Australian hair-restorer, 3s. and 5s. per bottle; indiarubber bath-sponges, 3s. and 4s. 3d. each; Magda toilet-cream, 2s. 9d. per jar; Mennon's borated talcum toilet powder, 9d. per tin; Navanoids (for sea-sickness), 4s. 2d. per bottle; Houbigant's Poudre Ideale, 8s., and Poudre Royale, 6s. per box; Tatcho, 1s. and 1s. 10d. per bottle; vaccination lancets (aseptic), 2s. 6d. each; vaccine lymph, 10d. per large tube, 1s. 3d. for three small tubes; Yardley's Imperial eau de Cologne, 1s. 9d. per bottle; Ozonateurs (gift), 4s. 6d. each; Ozonafine, 3s. 8d. per tin; Enderby's patent knee-caps, 25s. each.

The Society's own preparations include malt and cod-liver oil, sold at 1s. per 1-lb. bottle; cod-liver oil emulsion, 1s. per 8-oz. bottle; Norwegian cod-liver oil, 5d., 9d., and 1s. 4d. per 8-oz., 16-oz., and 32-oz. bottle respectively.

Contracts.

The following contracts with public bodies have been settled:—

Canterbury.—Messrs. Walker & Harris, of Canterbury, to be chemists to the city.

Crewkerne.—Mr. O. W. Catford to supply drugs to the School Board.

Elham (Kent).—Messrs. Corbyn, Stacey & Co., High Holborn, W.C., for the supply of drugs to the workhouse.

Grantham.—Mr. Harry Hopkinson, for the supply of disinfectants.

Maidstone.—Mr. F. R. Stonham, chemist and druggist, Maidstone, for drugs to the workhouse.

Stratford-on-Avon.—Mrs. Loggin, Stratford, to supply druggists' sundries to the workhouse.

Epiphany Offerings.

The annual offering of gold, frankincense, and myrrh on Epiphany Sunday took place at the Chapel Royal, St. James's, on January 5. King Edward has signalled the first celebration since his accession by restoring some of the dignity and impressiveness of which in recent years the ceremony has been shorn. Only small quantities of incense and myrrh were given, and the supplying of these is a privilege of the Apothecary of the Household. The gold took the form of twenty-five new sovereigns. The gifts are first enclosed in white envelopes sealed with red wax, and then placed in a crimson satin bag tied with gold cord.

Wine-licences.

A considerable number of "chemists" and other wine and spirit off-licences were transferred at the Kensington Licensing Sessions on January 7, but in only one instance

does the name of a registered chemist appear. The solitary exception is the transference of the licence held by Mr. John Arthur Barnett, pharmaceutical chemist, at 97 Uxbridge Road, Hammersmith, to Mr. Arthur Butcher.

Birmingham Notes.

At the Staffordshire Sessions on January 2, Messrs. Hedges & Son, chemists, appealed against the assessment of their premises at 111 Soho Road, Handsworth, but after a protracted hearing the appeal was dismissed with costs.

Dr. David Nelson, professor of chemical medicine at Queen's College, Birmingham, was the first physician to introduce pepsin into regular medical practice, and used it in 2,500 cases between 1851 and 1857, and the first liquor pepticus was prepared by Messrs. W. & C. Titterton, chemists, Birmingham. The name pepsin is derived, like the compound word dyspepsia, from the Greek, and denotes "difficult digestion."

Note by Editor.—This is interesting, but the following quotation from an article on pepsin in THE CHEMIST AND DRUGGIST, December 15, 1860, indicates that further light is required:—

The history of this remedy dates from a very remote period. It is mentioned by Pliny, and described by Galen, and also appears in the London Pharmacopoeias down to 1677. . . . In 1853 a French chemist succeeded in producing the very unique and comparatively agreeable preparation now in use, which was first introduced into this country by Dr. Ballard, of Myddleton Square, London.

The late Dr. George Harley also had to do with the introduction of pepsin in modern times; so much so that *Punch* satirised his connection with the matter in the pleasantest way.

All on Paper.

Messrs. Boots (Limited) and Taylor's Drug Company (Limited) are continuing the stiff newspaper fight in the populous towns of the West Riding of Yorks. The daily newspapers are getting quarter-page advertisements from companies day after day, and putting them in affectionate juxtaposition on the same page. Boots have opened out on a threatening scale at Leeds and Halifax, and Taylor's announce that they intend to run free entertainments in the Leeds Coliseum shortly.

Burgling.

At Clerkenwell Sessions on January 2, four youths were sentenced respectively to twenty-one, twenty, nineteen, and eighteen months' hard labour for breaking and entering the premises of Messrs. A. J. Fentiman & Co., manufacturing dentists, 2 Upper East Smithfield, E., and stealing various articles.

Three young labourers were sentenced to one month's hard labour apiece by the Portsmouth Magistrates on January 7 for breaking into the shop of the Timothy White Company at 111 Albert Road, Southsea, and stealing nine cases, containing twenty-two bottles of perfume. There were other charges of stealing against the prisoners.

At the West Kent Quarter Sessions on January 2, Joseph William Shaw (32), chemist's assistant, was sentenced to three years' penal servitude for burglariously breaking and entering the dwelling-house of Mr. Oliver Rogers, chemist and druggist, of the firm of Dunkley & Rogers, chemists, Tunbridge Wells, with whom he was formerly employed, and stealing seven cheques, 20l. 9s. in money, and various articles of wearing-apparel.

Vitriolic Spite.

Mr. Wm. H. Ludlam, chemist and druggist, West Street, Fleetwood, was a witness at Preston Quarter Sessions on January 1 in a case in which a waiter and a chambermaid were charged with damaging 200l. worth of furniture at a Fleetwood hotel with oil of vitriol. Mr. Ludlam deposed to selling 8 oz. of sulphuric acid to the waiter, whom he cautioned as to its use. The waiter got twelve months' and the chambermaid six months', with hard labour.

Cheap Physicking.

In making application to the St. Albans Board of Guardians on January 2 for an increase in salary, Dr. Wells, Medical Officer, stated that for 75l. per year he had to make 2,000 visits a year and to supply an average of fifty bottles of medicine per week, which worked out at less than 6d. for

each bottle of medicine and each visit. An increase of 157 per year was granted.

A Home-made Remedy.

An inquest was held at Perge last week on the body of the 4-weeks old child of Albert Wickens. The mother stated that the child had a cold, and she obtained some laudanum, peppermint, aniseed, and paregoric, and mixed it with treacle and water. She had been in the habit of using this mixture when her children had a cold, and she gave the child three half-teaspoons of the mixture. There was only about a pennyworth of laudanum to over a pint of water. Dr. Michael stated that he found the child suffering from bronchitis and in a lethargic state. There would have been 1 dr. of laudanum in the mixture. He considered that half a drop of the drug would have been sufficient to kill a weak child of that age. He had made a *post-mortem* examination and found evidences of bronchitis and congestion of the lungs. Death was due to these causes, and to the opium, but in what degree each contributed he could not say. Mr. Charles Henson Smith, chemist, 47 Anerley Road, said he sold the mixture. It was a very common mixture used as a household remedy, and he made it up without question. He labelled it "Poison" in accordance with the requirements of the law. He should have considered there was some risk in giving this mixture to a child of the age of the deceased, and he would have refused to have served it had he suspected what it was for. He thought it was for cough-mixture for an adult. The jury returned a verdict in accordance with the medical evidence.

Fly-papers Wanted.

Replying to a correspondent who called attention to the value of fly-papers in the hot weather in South Africa, Sir Redvers Buller says: "I am myself sending out some packets of fly-papers, and I will do my best, if occasion allows me, to advocate some fly-papers being included in all packages of supplies sent out from England to friends in South Africa."

Students at the Glassworks.

On New Year's Day the students of the Sheffield College of Pharmacy, accompanied by the principal and friends, visited the Rotherham Glassworks by permission of Messrs. Beatson. The party was personally conducted by the firm's works-manager (Mr. Winterbottom), and among the interesting processes seen were the making of hand-made bottles, the preparation of fireclay by repeated treading, and the moulding of dome-shaped crucibles each weighing 15 cwt. The latter take a fortnight to fashion, and require from two to four years to thoroughly dry before setting in the furnaces. The ingredients and colours for glass were shown and explained, concluding an excellent technological lecture. The manager having been thanked for his able and lucid guidance, the students returned to Sheffield by train about noon.

The Week's Poisonings.

Fifteen fatalities from poisonings have been reported since last week's issue. Four of these were due to the unscheduled poisons spirit of salt (2), phosphorus, and "a preparation for greased heel in horses." The scheduled poisons were carbolic acid (3), laudanum (3), chloral, arsenic, morphine, strychnine, and prussic acid. The hydrochloric acid was taken in one case by a Maidstone woman, who drank about 5 oz. A doctor at the inquest told the jury that a teaspoonful would kill, and that there was no restriction on the sale of the poison.—In the second case, a house-painter in Caledonian Road, N., drank some by mistake from a pickle-jar. It was stated in evidence that the spirit of salt had been obtained from an oil-shop.—A well-known cricketer, named Beaumont, drank a quantity of Smith's weed-killer at Carshalton last week, and died from arsenic-poisoning.—A labourer at Fenton died from poisoning on January 1. In his pocket was found an empty packet labelled "Scarlett's vermin-killer," which deceased had bought at the shop of Mr. Heap, chemist and druggist, Hanley, some time before. The powder consisted of strychnine mixed with sugar of milk.—A Birmingham house-furnisher named Gordon, who was troubled with insomnia, went to the branch shop of Magor's (Limited), in

Stratford Road, and asked for sixpennyworth of chloral hydrate. He said he was used to taking it as a sleeping-draught. He became impatient when Mr. Patrick, the manager, told him he must not take more than a sixth or an eighth part at the most. Mr. Patrick gave the deceased $\frac{1}{4}$ oz. He asked the deceased to sign the poison-book, and he did so. Half an hour later he was informed of the deceased's condition, and gave an emetic, at the same time advising that a doctor be sent for. Dr. Chadwick injected morphine twice, but in spite of all efforts the man died.—The Hastings Coroner, on January 6, inquired into the circumstances of the death of a gentleman named Bisset, a Ceylon coffee-planter, who suffered from cancer of the tongue. Deceased had only lately arrived in England, and a London physician, whom he had consulted, had advised morphine-injections. A Hastings medical man, Dr. Brodribb, said that as the injections of morphine had been prescribed in London he continued them. The deceased had complained that the morphine did not make him sleep. The nurse had been giving 10m. of 1 in 20. The witness ordered 6m. of 1 in 12. Of this he had one injection. The deceased died from morphine-poisoning, consequent upon congested kidneys. Had the doctor known of the kidney-disease he would not have given the drug, but only have followed the course of treatment from the physician in London. A verdict of death from misadventure was returned.

Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Personal.

Dr. Meredith R. Whittle, M.C.P.S.I., Monaghan, has been nominated as a member of the local Urban Council.

Mr. S. Wilson, J.P., pharmaceutical chemist, Medical Hall, Longford, has been installed, for the sixth time, Secretary and Treasurer of Masonic Lodge 76, Longford.

At the examination for assistants to apothecaries and pharmaceutical chemists, held on January 3 at the Apothecaries' Hall of Ireland, 40 Mary Street, Dublin, Mr. Thomas P. Keawell, Nagles Medical Hall, 23 Bolton Street, the only candidate, passed successfully.

Contracts.

The Governors of the District Lunatic Asylum, Mullingar, have accepted the tender of Mrs. English, of that town, for the supply of drugs and medicines during the ensuing year.

Poison Accident.

On June 4 a girl named Culbert, of Holywood, Belfast, took some oxalic acid instead of Epsom salts, but recovered after the administration of an emetic. On the same day a woman named Silcock was detained at the Royal Hospital, Belfast, suffering from the effects of drinking hydrochloric acid.

Laudanum poisoning.

The Coroner's jury which investigated the death of Lieutenant Winter (*C. & D.*, January 4, page 4) returned a verdict of death through an overdose of laudanum. The suggestion of suicide did not arise, and is erroneous, for deceased was buried with full naval honours.

Accidental Poisoning.

On January 6 the Dublin City Coroner (Dr. Byrne) held an inquest into the death of a child, named Sullivan, who died in the Cork Street Hospital. It appeared from evidence given that the child was taken to the hospital three weeks ago suffering from typhoid fever. On Saturday evening Cornelius Foley, resident pupil in the hospital, instructed Nurse Hanell to fill a bottle of medicine from the stock-bottle "mist. acid. sulph." He pointed out the bottle to her and mentioned the name at the same time. He then turned to do other work, and did not see the bottle of medicine again in the pharmacy. There were a number of other bottles on the counter at the same time. There was carbolic

acid in the bottle he directed the nurse to use. There was carbolic acid in a blue bottle also, but the "mist. acid. sulph." was in a white bottle. There was a prescription on the patient's bottle, but his directions to the nurse were verbal. The medicine contained glycerin, carbolic acid, aromatic sulphuric acid, and water. Dr. John Day, physician in charge of the hospital, said he was present in the surgery when the mistake occurred. The child's father said that the matter was purely an accident, and so did the jury.

Scotch News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Personal.

Mr. John Fraser, chemist and druggist, has been re-elected Chairman of the Helmsdale Parish Council.

Mr. George Cruickshank, who has been with Mr. George Milne, chemist and druggist, Turriff, for the past two years, has been presented with a gold pendant and scarf-pin by a few friends, on his departure for Aberdeen.

Business Changes.

Mr. J. A. Finlay, chemist and druggist, has purchased the business of Mr. D. F. Macdonald, 302 Morningside Road, Edinburgh.

Mr. Robert S. Ramsay, chemist and druggist, has acquired the business carried on by Mr. A. N. Bowman at Auchterderran, Cardenden, Fife. Mr. Bowman continues at Lochgelly.

Messrs. Wm. Hay & Sons, aerated-water manufacturers, of Aberdeen, Inverurie, and Alford, have acquired the extensive business known as the Barkmill Aerated-water Works, lately belonging to Mr. R. H. Strachan.

Mr. Robert Inglis, chemist and druggist, who has managed Mr. Arthur McKellar's pharmacy at 69 South Portland Street, Glasgow, for some time, has now acquired the business for himself, and will carry it on under the style of "Alexander Kinninmont (R. Inglis, proprietor)." Mr. McKellar, pharmaceutical chemist, will continue his business at 6 Kensington Terrace, Ibrox.

Glasgow Notes.

The small percentage of passes at the recent Minor examination in Edinburgh is causing a mild sort of consternation. The "surgeon-druggists" are especially interested in the matter, as several of them are anxious to employ qualified men if it were possible to get them.

Trades generally report that there has been a distinct falling-off in the demand for Christmas perfumes this season. Our friends the drapers are credited with annexing a large portion of what was at one time the chemist's perquisite.

To Replace the Preliminary Examination.

The Educational Institute of Scotland has replied as follows to the Secretary of the Forfarshire and District Chemists' Association:—

The information you furnished was carefully considered, and the conclusion came to was that meanwhile examinations could not be specially held in Dundee, more particularly as the distance from Edinburgh is not great, and the expense of a separate examination would be very considerable.

Aerated-water Bottles.

In the Aberdeen Sheriff's Court recently, Sheriff Robertson gave his decision in an action by Mr. R. H. Strachan, aerated-water manufacturer, against Messrs. W. Sinclair & Co., wholesale druggists and aerated-water manufacturers, Aberdeen, for an alleged infringement of interdict granted in March last, restraining the defendants from using the words "Strachan, Aberdeen," or "Strachan's, Aberdeen," on labels or bottles. The Sheriff found that there had been no breach of interdict, except in the case of three bottles, which was admitted. He said that when the bottles complained of were the property of the respondents, and the part

of the bottle which was likely to induce mistakes is completely and apparently securely covered up by defenders' own label, he was not prepared to hold that the use of the bottles so labelled is in breach of the terms of the interdict granted. He imposed no penalty, but found respondents liable in expenses, which he modified at 3/ 3s.

Science for School-teachers.

A new science laboratory was opened on January 6 at Moray House United Free Church Training College, Edinburgh, by Mr. Thomas Shaw, K.C., M.P. It is a building of three storeys, with a floor each for the teaching of physics, chemistry, and art. Provision is made in the physics and chemistry departments for the teaching of sixty-four students in each department, and a room is also available for photographic and photometric work. Practical zoology and botany will be taught during the summer session.

South African News.

PERSONAL.—Mr. and Mrs. F. H. Carman have returned to Cape Town by the *Gaul*, and both are greatly improved in health by their sojourn in the Old Country. It will be remembered that before leaving South Africa Mr. Carman sold his business at Woodstock, Salt River, to Messrs. Hopkins & Co.

PHARMACEUTICAL SOCIETY OF CAPE COLONY.—In connection with the meeting to be held on January 19, a circular has been forwarded to all the chemists in Cape Town and the suburbs, signed by Mr. D. K. Petersen (of P. J. Petersen & Co.), Mr. F. C. Mathew (of Heynes, Mathew & Co.), Mr. A. J. Rivett (of Lennon, Limited), and Mr. Geo. Darroll (of Cleghorn's pharmacy), convening a meeting for the evening of January 18, to consider the question of agreeing to uniform prices for the retail trade.

CAPE TOWN CHEMISTS AT LAW.—In the Supreme Court, Cape Town, before the Acting Chief Justice (Sir John Buchanan) and Mr. Justice Maasdorp, an application was made by Mr. Searle, K.C., on behalf of Messrs. Lennon (Limited) for an order requiring the Town Council of Cape Town to approve certain plans for proposed alterations to their property in Strand Street and Adderley Street. The Council alleged that the proposed alterations constituted an encroachment beyond the line of building-frontage. This was denied by the applicants. After argument, the Court held that the proposed alterations would be an infringement of the contract between the parties, and judgment was for the Town Council, with costs.

CHARGE AGAINST W. H. KERR.—We have already reported (*C. & D.*, December 21, 1901) the result of the trial at the Special Criminal Court, Bloemfontein, on November 1, of William Henry Kerr, dispenser at the Refugee Camp there, who was charged with culpable homicide, by failing to exercise proper skill and care, dispensed a certain liquid—viz., strychnine—which caused the death of three children. Mr. C. L. Botha appeared on behalf of the Crown, while Advocate G. A. Hill, assisted by Attorney G. R. Jooste, defended. The hearing of evidence occupied the Court two days. At the conclusion of the hearing, after about twenty minutes' consideration in private, the President said the Court had carefully considered the very serious case, especially as a man's liberty was at stake. The case had been a very unsatisfactory one throughout, and he thought that the prosecution had failed. There had certainly been some very strong circumstantial evidence against the accused. The evidence of Sister Bryant at first seemed very strongly corroborated. At the same time, the question arose, Why had the medicine-bottle to be refilled twice during the Saturday preceding the demise of the children? He was of opinion that in many instances evidence had been transposed, and that mistakes had been made. If he thought otherwise, the grossest perjury he had ever heard of had been committed. At first it had looked as if the accused had filled the medicine-bottle unconsciously, but Nurse Bryant might also unconsciously have done it while she was speaking to the accused in the dispensary; but in that case the accused would still have been responsible. There was a strong doubt in the mind of the Court, and the accused would accordingly be discharged.

French News.

(From our Paris Correspondent.)

THE PELLETIER CAVENTOU MONUMENT.—The latest list of subscriptions to this monument show the total to be 33 463*fr.*, which is still insufficient to cover the cost, and the list remains open.

NANCY SCHOOL OF PHARMACY.—M. Godfrin, professor of Medical Natural History, has been appointed Director of the Nancy School of Pharmacy for three years, in place of the late M. Bleicher, who was assassinated there last year.

FOSTERING THE EXPORT-TRADE.—The seventh number of the series of Industrial and Commercial Monographs for fostering the export-trade of France has recently been published under official auspices by the National Office for Foreign Trade, as already announced in the *C. & D.*, and is devoted to "Le Commerce de la parfumerie à l'étranger et aux colonies." Its contents are practically confined to giving such information as is likely to be of assistance to French perfumery-manufacturers. It aims to cover the leading markets of the world, and the contents table is divided under the headings Europe, Asia, Africa, America, and Oceania. The information given strikes the experienced exporter as being in some cases of a slightly elementary nature, but I have no doubt that English perfumery firms would be interested in consulting the book. The compilers have aimed at giving the following information, which has been supplied by French Diplomatic and Consular Agents and French Chambers of Commerce abroad:—

The quantities of the following classes of perfumery imported into the leading foreign cities:—

(1) Toilet soaps; articles of perfumery, such as cosmetics, dentifrices, toilet-waters, toilet-powders, hair washes and dyes.

(2) Amount of imports; fine perfumery, cheap perfumery.

(3) Nature of the perfumery and soaps produced in each country.

(4) Style of putting up goods, and usual contents of bottles and boxes.

(5) Cost of carriage, Customs dues, methods of payment

(6) Customs and habits followed in purchasing.

(7) Names and addresses of the principal agents in each country capable of representing French perfumery-houses.

(8) List of the most important perfumery-shops, large bazaars, drapers, hairdressers, and all other retailers selling perfumery articles, such as pharmacists, druggists, grocers, &c., whom manufacturers can address either through the post or by travellers.

The following details regarding the perfumery trade in Great Britain are fairly representative of the contents of the work:—

General Information.—England manufactures all kinds of perfumery. It imports from Germany a large quantity of cheap products and buys from France the higher class goods, as well as some essential oils. Statistics follow of the quantities and values of perfumery imported into Great Britain, comparing the trade of 1895 with that of 1899. The writer continues: "It will be noticed that Germany is supplanting France little by little, thanks to the cheapness of the raw materials which it supplies to English manufacturers. Perfumery is sold under the label of the maker, and the goods are put up in a similar way to those sold in France. Settlements are, as a rule, made at thirty days' date."

Duty.—"Perfumery and products employed in its manufacture (except perfumed alcohol) are free of duty." The goods that pay duty are indicated together with the tariff, and also cost of carriage to England.

London.—"French perfumery, and particularly the best-class goods," say the compilers, "are much appreciated in London, where the leading manufacturers are represented. Our goods have to meet the competition of the home-made articles and those of the Germans, whose products are cheaper than ours. Offers of service can be made to the following firms." The names follow of four of the leading stores, and four wholesale firms. Information of a somewhat similar nature, with or without addresses, is also given about Cardiff, Glasgow, Liverpool, Newcastle-on-Tyne; but whereas eight names are mentioned for London, seventeen are indicated for Newcastle, thus giving to the uninitiated the impression that the latter town is by far the most important market for perfumery in Great Britain.

HYDROPHOBIA STATISTICS.—According to statistics drawn up by the medical authorities of Paris it appears that 23,165 persons bitten by mad dogs have been inoculated at the

Pasteur Institute against rabies since 1886, when the method was first introduced. During the sixteen years only 107 persons succumbed after inoculation. In connection with Pasteur it may be added that his statue will be ready in a few months, and will be erected in the square of the Sorbonne.

ENGLISH PHARMACISTS IN FRANCE.—A result of the law requiring foreigners who wish to start business as pharmacists in France to go through a complete course of general study here was shown in a recent advertisement in a Paris journal. It reads as follows: "A young English pharmacist seeks an active pharmacien, having the French diploma, to participate in the purchase of a pharmacy in the South of France. A very good opportunity to set up in business without capital." Thus an English pharmacist who cannot get the diploma here is apparently willing to provide capital and share the profits with a pharmacien who might otherwise have a chance of remaining an assistant all his life.

Business Changes.

MR. ELLIOTT has opened a new pharmacy in Cheetham Hill, Manchester.

BARRON'S DRUG STORES, of Trafalgar Road, Greenwich, S.E., have opened a branch at 291 New Cross Road, S.E.

MESSRS. REED & SIMNETT, chemists, late of High Street, Lewisham, and Perry Vale, Forest Hill, S.E., have purchased the business of Alfred Allchin (Limited), at Englands Lane, Haveringstock Hill, N.W.

MESSRS. FLATTERS & GARNETT (LIMITED) have now opened their new pharmacy at 48 Deansgate, Manchester, which has been handsomely fitted for them by Messrs. Ayrton & Saunders.

MR. JOHN BENSON, chemist and druggist, formerly of Kirkby Lonsdale, has taken over the business lately carried on by Mr. C. H. Smith, chemist and druggist, at 68 Dalton Road, Barrow-in-Furness.

MR. J. JAMES, chemist and druggist, late of Barnsbury Street, Islington, N., has purchased the business lately carried on by Mr. H. N. Daridge, pharmaceutical chemist, at Imperial Buildings, Ludgate Circus, E.C.

MR. ABRAHAM WALTER GREAVES, chemist and druggist, Chesterfield, has taken his son, Mr. Sydney Cnater Greaves, chemist and druggist, into partnership, and the business will in future be carried on under the style of "A. Greaves & Son."

THE business lately carried on by Mr. R. L. Griffiths, chemist and druggist, at Hadlow, Tonbridge, has been acquired by Messrs. Hailstone & Knight. Mr. Knight has another business at Crowthorne, Berks. [Corrected announcement.]

MR. W. H. CLUBB, pharmaceutical chemist, Sefton Park and Wavertree, Liverpool, has taken Mr. J. Austin Thomas, chemist and druggist, formerly of Birkenhead, into partnership, and the title of the firm in future will be "W. H. Clubb & Co."

MESSRS. J. & G. COX (LIMITED), gelatin-manufacturers, of Edinburgh, have removed their London office from Eastcheap Buildings to more commodious premises at 24 Eastcheap, E.C. Mr. Leonard H. Roberts continues as their London agent.

THE business carried on by the Ulster Chemists (Limited) at 124 Newtownards Road, Belfast, has been purchased from the liquidator by Mr. John H. Shaw, who was the original owner of that establishment. The company's business at Limavady has been bought by the original vendor, Mr. George W. Lawson, who will carry on the business in future. The business at 171-173 New Lodge Road, Belfast (formerly Mr. W. J. Rankin's), was sold on December 20, 1901; but the lease of the premises was purchased by a gentleman who will put the three golden balls over the doorway.

IN MACKINTOSH MANUFACTORIES the work is done by women—men cannot stand the fumes—who, it is said, become confirmed drunkards. This is due to the inhalation of carbon bisulphide, which creates a desire for drink.

Australasian News.

Chiefly from "The Chemist and Druggist of Australasia,"
December 2, 1901. 6d. per copy, post free.

THE QUEENSLAND PHARMACY BILL has been somewhat modified in its passage through the Legislative Council. The Board to be elected for the purposes of the Act is to be elected entirely by the registered pharmacists instead of four members by the Government and three by the pharmacists. A definition of pharmaceutical chemist is proposed to be added to the Bill as "a person skilled in the business of the preparation and preserving of drugs and of compounding and dispensing medicines according to the prescriptions of legally qualified medical practitioners, and registered," &c. The Bill proposed to pay one or more members of the Board to act as examiners, but this indirect payment of members of the Board was objected to by the Council. A new sub-clause was proposed by the Government exempting from the penal section of the Act—

(IV.) Any joint-stock company, if and so long as [the majority and at least three of the directors of such company are pharmaceutical chemists and] no part of the name of such company comprises the name of any person who is not a pharmaceutical chemist and a director of the company at the date of its registration.

The Council omitted the words in brackets. A long proviso was added to the same clause—

Save as by this Act is otherwise provided, it shall not be lawful for any person, firm, corporation, joint-stock company, or society to carry on the business of a pharmaceutical chemist under any personal or firm name other than the name or names of the pharmaceutical chemist or chemists carrying on the said business, or under any title or sign, unless the name or names of [such pharmaceutical chemist or chemists, with the addition of the word "proprietor" or "proprietors,"] is or are all legally set forth in conjunction with the name, title, or sign of the business in every signboard, label, invoice, or other document in which such name, title, or sign is or are used in or in connection with the business.

Any person, firm, corporation, company, or society carrying on business contrary to the provisions of this section shall be liable to a penalty not exceeding Twenty pounds, and to a further penalty not exceeding Ten pounds for every day during which the offence is continued after conviction.

The Council amended the phrase printed in brackets to the following "the pharmaceutical chemist or chemists who are actually proprietors, managers, or superintendents of such business, with the addition of the word 'manager' or 'managers.'" Homoeopathic chemists, who were exempt from the operation of the 1884 Act, continue so as the effect of the modifications of the definitions and addition of a sub-clause by the Council.

CHECKING THE CHEMIST.—During the debate the Hon. D. Marks read from a copy of THE CHEMIST AND DRUGGIST a paragraph from Dr. Luff's inaugural address to the students of the Pharmaceutical Society of Great Britain. What he did not like in the address was that, while it pointed out that the pharmacist was a check upon the medical man, it did not point out that the chemist might require the same careful watching, for he was just as liable to error as the medical man. The speaker, however, did not see how they could provide in the Bill for a check over the chemist.

THE PROFESSION OF PHARMACY.—During the passage of the Queensland Pharmacy Bill through the Legislative Council, two medical members referred to the use of the word "profession" as applied to pharmacy in the Bill. The new Bill proposed to give the Board power to erase from the register the name of any registered chemist "who is, after due inquiry, judged by the Board to have been guilty of infamous conduct in a professional respect." The word "professional" put the medical members of the Legislative Council in arms at once, and the words "in a professional respect" were struck out, and "in respect of his calling as a pharmaceutical chemist" were substituted. The word is, however, retained in clause 26, sub-clause 7, which authorises the Board to make by-laws prescribing the course of study, "professional" practice, &c. The C.D.A., commenting on this, says:—

Rarely are two prescriptions presented with exactly the same

ingredients. The pharmacist has to apply his knowledge of the principles of chemistry and of the rules of art to the fresh problem supplied by the new prescription. So far as his business consists of work of this kind, he has a distinct claim to the title "profession," just as much a claim as the physician who at first glance diagnoses a case of measles, and yet has to take into account the innumerable factors of the patient's physical constitution and the particular stage of the disease before writing his prescription and giving his directions for treatment.

WHOLESALE DRUGGISTS COMBINE.—As the result of a meeting of the wholesale druggists of Adelaide on November 1, 1901, a Wholesale Druggists' Association is being formed. The new Association is to affiliate with the Grocers' Association, which has been in existence for twelve years, with the object of fixing terms and prices of the leading lines of proprietary medicines.

CONDY'S CRYSTALS.—The Pharmaceutical Society of Australasia have resolved to take counsel's opinion as to the present legal position in reference to the sale of permanganate of potash.—The Chemists' Defence Committee are appealing to Victorian chemists for subscriptions to make up the out-of-pocket expenses (200%) incurred by Mr. Craven in defending the recent action against him.

PHARMACY LECTURER.—Mr. William Whitbread, pharmaceutical chemist (G.B., July 15, 1890), laboratory director with Messrs. A. M. Bickford & Sons, Adelaide, has been appointed lecturer on pharmacy at the Adelaide University. Mr. Whitbread went to South Australia in 1890, and became assistant with Messrs. Stedman & Hoile, Rundle Street, and afterwards manager of Messrs. Smith & Osborne's business, North Adelaide. He then took up his present position with Messrs. Bickford.

OPIUM PROHIBITION.—The N.Z. Opium Prohibition Bill passed its second reading in the House of Representatives on October 9. The Premier announced that there would be a loss of revenue of 8,000% to 9,000% a year, and this was taken to mean that the vice of opium-smoking must have developed to a very large extent. The power to enter premises occupied by Chinese without a warrant was feebly objected to, but was allowed to pass without any serious opposition.

POISON IN PROPRIETARIES.—A proprietor of certain family medicines submitted his formulae to the Pharmacy Board of New South Wales, and two of the recipes were found to contain small quantities of poison. A discussion thereupon arose amongst the members of the Board as to the policy of being too strict in interpreting the Act, but ultimately the proprietor of the medicines was informed that he could not, without breaking the law, sell to the public medicines containing scheduled poisons.—At the same meeting a communication was read from the Board of Health that an analysis of Powell's balsam of aniseed showed that it contains none of the scheduled poisons, no morphine or opium compounds being present. A previous examination, made in 1900, gave 2 gr. of opium per fl. oz. Further inquiries are to be made in this case, as well as into the matter of Capilla hair-tonic, which the Board of Health find to contain a scheduled poison—carbolic acid.

MEDICAL PRIVILEGES.—The Pharmacy Board of Victoria is to take proceedings against a medical man who, as trustee of the business of a deceased pharmaceutical chemist, has registered himself under the Firms Act as one of the proprietors of the business, although he is not personally interested in the business nor attends the shop. Under section 95 of the Medical Act an exemption is made that the Act shall not extend to or interfere with the business or with any rights and privileges of any legally qualified medical practitioner. Under section 97 of the Act it is provided that any person not being a registered pharmaceutical chemist who takes, uses, or exhibits the name or title of chemist shall be liable to certain penalties. In this case the medical practitioner referred to was not a registered pharmaceutical chemist, and it was contended that the exemption under section 95 did not override the provisions of section 97. The case has been submitted to counsel for an opinion, and counsel advises that the rights and privileges expressed by section 95 do not warrant the keeping of an open shop as a trustee under the will of a deceased pharmaceutical chemist, and that the medical man is, therefore, liable to the penalties under section 97.

American Notes.

FOR CONGRESSISTS.—Dr. Frank Wilson, a member of Congress for Brooklyn, has introduced a Bill providing for the maintenance of a Congressional drug-store in the capital, to supply drugs to the members of Congress in case of an emergency.

AS IN GREAT BRITAIN.—Twenty-four druggists wanted assistants, according to a recent issue of a Philadelphia Sunday paper, while but seventeen clerks seemed to be looking for jobs. For some time the experience of more druggists wanting clerks than there are clerks wanting druggists has been the rule in the Quaker city.

A TINWARE COMBINATION.—A company is said to be about to be organized to compete with the combination known as the American Can Company, manufacturers of tin cans, boxes, &c., for druggists' and manufacturers' use. Druggists say they are now obliged to pay 50 per cent. more for talcum, ointment, and similar tin boxes than they did before the combination was effected.

THE PEDLAR DRUGGIST.—A perambulating drug-store is the latest New Jersey pharmaceutical innovation. An enterprising druggist has fitted out a motor-car with a stock of drugs, and he is to emulate the milkman and the fish cadger in making a house-to-house canvass for customers. A patent-medicine and sundry business may thus be successfully done, but one can scarcely imagine an extensive prescription business being built up in this manner.

COUNCILLORS—AND SCOTCHMEN.—Two prominent druggists are now members of the City Council of Buffalo, and both are Scotchmen. The newest member is Mr. Thomas Stoddart, of the firm of Stoddart Brothers, druggists, Buffalo, president of the New York State Pharmaceutical Association, and of the Empire State Drug Company. His colleague is Mr. Neil McEachren, who has been elected a member of the Buffalo Board of Aldermen. Mr. McEachren, who has also a good-going business in the City, was a County Supervisor before being alderman.

CHEMISTS CO-OPERATING.—The Pharmacists' Manufacturing Company, of New York City, has been incorporated at Albany with a capital stock of \$20,000, made up of 800 shares of \$25 each, and its objects are to manufacture and sell drugs of all kinds. Until it has been decided otherwise by the Board of Directors, stockholders will be limited to the purchase of four shares each, and no druggist can become a stockholder until he has invested \$100, or bought four shares of stock. The company is designated as a co-operative organisation, and only retail pharmacists are eligible as shareholders. Any druggist will be allowed to purchase goods of the company, but only stockholders will get the advantages of a reduction in prices. The membership list contains thirty-seven names at present. Building operations are to be begun as soon as a suitable site has been obtained. The company will confine its operations to manufacturing at first; later it will probably do a general wholesale drug business as well.

WAY DOWN IN TENNESSEE.—The practice of pharmacy is apparently carried on in a lively and unconventional fashion in the southern States. Two items from there indicate the primitive and unanswerable methods of retaliation which prevail amongst its citizens. A young pharmacist who had a quarrel with the chief of police at Meridian finished the interview by throwing a quantity of vitriol in the officer's face. The injured man was fearfully burned, and the aggressor is in gaol.—The proprietor of a drug store in McEwen, Tenn., had a dispute with a local doctor about a prescription. During a heated argument the physician drew his pistol and shot the druggist dead.—A sensational poisoning case has recently been agitating Memphis. A woman is on trial for the alleged poisoning of her husband with arsenic, and two of the principal witnesses are the proprietor of a Memphis drug-store and his assistant, who both testify to selling arsenic to the accused. The deceased man was presumed to have died from gastritis, but, on the body being exhumed and an examination made, arsenic and powdered glass were found in considerable quantities in the stomach.

Colonial and Foreign News.

NOT APPRECIATED BY THE FAIR SEX.—Although pharmacy in Hungary has been open as a profession to women for the past four years, only one lady has passed the examination. The eight ladies who entered at the beginning soon abandoned the profession.

THE NAPHTHA UNION.—At a meeting of naphtha merchants at Baku, summoned to deal with the export question, the firms of Nobel and Mantaxbeff withdrew from the Naphtha Union. The other firms, headed by Rothschilds, are stated to have established a combination for the export trade, which is expected to result in an improvement in prices.

ACCIDENT TO PROFESSOR VIRCHOW.—As Professor Virchow was alighting from an electric-tramway car in the Leipziger Strasse, Berlin, on Saturday evening January 4, while the car was still in motion, he had a serious fall, which resulted in a fracture of the thigh and various contusions on the legs, in consequence of which the Professor will for a long time be confined to his room.

SOAP AND SUBSTITUTES FOR SOAP IN SYRIA.—The American Consul points out that while toilet and shaving soaps are imported from abroad, the Syrian soap-manufacturing industry is by no means unimportant. This refers particularly to the Nablous, Haifa, and Tripoli soap-factories. "Mount Carmel" soap is manufactured by an American firm at Haifa. The Consul also refers to the use of the soapwort as a detergent and gives a Beirut firm of exporters a gratuitous advertisement about it.

AUSTRIAN ITEMS.—The new (second) edition of the Pharmacopœia for the provinces of Croatia and Slavonia is completed, and will come into force on March 1 of this year. In these provinces pharmacy is now also open to ladies under the same conditions as to the sterner sex. But each application must be presented by the "Landapothekergremium" to the Government, which decides every permit. Pharmaceutical lectures for ladies at the Francis-Joseph University at Agram will not be instituted until 1904.

A SCHOOL OF MEDICINE for the training of native practitioners was established in Tanauarivo in 1897 and has up to the present time sent out 15 qualified men whilst there are 104 students on the books. The teaching staff consists of seven persons: two are civilian doctors of medicine (one European and one Malagasy) and five are medical men or pharmaceutical chemists of the colonial service. The curriculum is of five years' duration, and native practitioners have the opportunity of competing for appointments in a branch of the colonial medical service at salaries ranging from 60% to 100% per annum.

FOR THE PUBLIC HEALTH.—The National Assembly for the Republic of San Salvador has decreed the formation of a Public Board of Health. The Board is composed at present of thirteen members, one being a pharmacist. Their object is, with the help of the Government, to better the sanitary condition of the country, and provide special committees on vaccination, food analysis, &c. A quarterly bulletin of the work done will be issued. The first of these, published in September of last year, gives very complete statistical tables of sickness and death-rate, vaccination, and meteorological observations. The President of the Board is Dr. Thomas G. Palomo.

NOTES FROM HONOLULU.—The Board of Health of Hawaii has warned druggists from counter-prescribing. The Executive Officer stated that in one case he learned that a drug-clerk had sold homœopathic aconite upon being told that a child had a high fever. The child died. The father had given the patient three of the pellets, and she had gone to sleep never to awake.—A Honolulu druggist has lost a suit for \$500 brought by Mrs. Julia Ponsonby for damage to her complexion. She sent to the druggist a prescription for a complexion-wash containing 4 gr. of bichloride of mercury. The druggist put in 5½ gr., and the wash ruined the lady's face. Judge Estee, of the United States District Court of Hawaii, held that there was sufficient evidence to show that the additional 1½ gr. of the bichloride of mercury had been the active agent in destroying the plaintiff's complexion.

Pharmaceutical Society of Great Britain.

COUNCIL-MEETING.

WEDNESDAY'S meeting opened with a vote of sympathy to the family of the late Mr. J. T. Davenport, several of the councillors adding eulogistic remarks from personal knowledge of his good qualities. Dr. Balfour Marshall's report on the Scotch examinations was read, in which an increase in the percentage of passes in the Minor examination was noted. The cause is put down to the increased fee preventing candidates presenting themselves before they are sufficiently prepared. The figures for the examination just finished in Edinburgh do not look as though the increase is to be maintained during the present year. The Finance Committee's report showed that the balance at the end of the year was about 1,000*l.* less than the year before, which is accounted for, according to the President, by the loss of Preliminary-examination fees. The subscriptions to the Benevolent Fund, despite the adverse conditions of the past year, were only 30*l.* below the previous year. The policy of the committee has been to make more grants to needy persons, and in this way 1,000*l.* was distributed last year. Mr. Lord Gifford made an inquiry as to the duties of the *Journal* sub-committee, and is to put his suggestions in writing.

At the monthly Council-meeting, held at 16 Bloomsbury Square, W.C., on January 8, there were present the President (Mr. Newsholme), the Vice-President (Mr. Allen), the Treasurer (Mr. Atkins), and Messrs. Carteighe, Cooper, Cross, Gifford, Glyn-Jones, Harrington, Hills, Martindale, Park, Savory, Southall, Storrar, Symes, Taylor, and Wootton.

DEATH OF MR. DAVENPORT.

After the reading of the minutes of the December meeting the PRESIDENT referred to the death of Mr. J. T. Davenport, which took place on December 29. Mr. Davenport became a member of the Society in 1842, and took the deepest interest in the work of the Society. He was an examiner from 1850 to 1875, member of Council from 1849 to 1865, Vice-President from 1853 to 1855, when he was elected President. Mr. Davenport had a great deal to do with the passing of the 1852 Pharmacy Act, and occupied the Presidential chair between the years of office of Mr. H. Deane and Mr. Jacob Bell. He was associated with the Society at a time when there was an immense amount of labour required to be done, and to the work of Mr. Davenport and his colleagues was due in a great measure the success of the Society in after-years. He lived the greater part of his life within a stone's throw of the Society's house, but had of late years lived at Brighton. The President then proposed a vote of sympathy with the family of the late Mr. Davenport.

The VICE-PRESIDENT, in seconding the vote, said he could add nothing to what had been said from personal knowledge, but had met Mr. Davenport on several occasions, and had been impressed with his remarkable presence and geniality.

Mr. CARTEIGHE said, with the exception of himself, Mr. Davenport was the last of a set of men who were examiners before the passing of the 1868 Act, and who took a prominent part in promoting the legislation of the day. Mr. Davenport began business as, what was called, an "operative" chemist; he had been trained at University College, and, like Morson, possessed considerable scientific skill. Mr. Davenport was his (Mr. Carteighe's) senior, but as a young man he was brought into association with him not only on the Council and Board of Examiners, but in social life. Mr. Davenport was a man of extreme amiability, and was also a good classical scholar. He was one of the few men who undertook the Preliminary examination in what he might call the prehistoric days, but his examinership was continued to the time when the examination was conducted more systematically. Having become successful in life Mr. Davenport

practically retired from business whilst still comparatively young, and lived at Brighton. Those who attended the British Pharmaceutical Conference and the meeting of the British Association at Brighton in 1872 would remember the hospitality and geniality he showed to the visitors. His (Mr. Davenport's) house was near a hotel where a good number of the Conference visitors were staying—it would correspond to the headquarters of the present day—and practically all who remained for the British Association meeting were made free of the house. It was particularly striking to see the younger men's delight with their host Mr. Davenport was a man of culture and a born gentleman.

Mr. MARTINDALE said he was examined by Mr. Davenport, and his geniality to all the candidates was most marked. He had been associated with him, after he left London, on the Drug Committee of the Royal Free Hospital, which had to do with examining the drugs supplied to that institution.

Mr. COOPER said he had had a life-long appreciation of Mr. Davenport from the way he treated him at the examination. He (Mr. Cooper) had been reading very hard with the late Professor Braithwaite, depriving himself of sleep, and as a consequence was in an extremely nervous state at the examination. Mr. Davenport showed him such great kindness on that occasion that it made a lasting impression.

The TREASURER, as one of the fossils, desired to offer his testimony to the well-deserved eulogies which had been passed on Mr. Davenport. He was one of the links with the past, and when such men pass away those who knew them ought to bear testimony to their worth. He remembered the Brighton Conference, and how his friend Groves, of Florence, was there with his young Italian wife. They were all invited to Mr. Davenport's house, and he should never forget the very handsome way in which Mrs. Groves, in her broken English, endeavoured to convey her thanks and impressions of Mr. Davenport's striking personality.

ABSENTEES.

The PRESIDENT announced that he had received a letter from Mr. Corder regretting his inability to be present. Mr. Corder's son is suffering from glaucoma, and had had one of his eyes removed. Mr. Harrison had also written that he was unable to be present.

EXAMINATIONS.

The Privy Council sent on a copy of the report of Dr. Balfour Marshall, the Government visitor to the examinations in Edinburgh, which the Secretary read. The report gave the percentage of passes for the Major as fifty (there were eight candidates), and noted that a higher percentage passed than at any time during the past five years. The standard of work was also very much better, as none of the candidates completely failed in any of the subjects; their want of success being due to failure in obtaining the full aggregate of marks required for a pass. This, it was added, should be an encouragement for these rejected candidates to again present themselves for examination at an early date.

For the Minor examination the percentage of passes was 44.3, the number of candidates being 415. The following are Dr. Balfour Marshall's "remarks":—

"I have previously been able to report a gradual though slow increase in the percentage of passes, with the exception of last year, when there was a slight falling-off. This improvement has been even more marked than the figures apparently show, as the standard of work over the whole range of examination subjects has been better, due no doubt to more thorough training. This year the percentage of passes has suddenly risen to 44.3 per cent., or nearly 9 per cent. over those of last year, and the candidates have done even better than these figures seem to indicate, as the number who obtained marks in each subject but only failed in the aggregate represents nearly 41 per cent. of the total failures. The practical work was much better done than usual, 69 per cent. being successful, as against 62 per cent. last year. In the oral part of the examination the greatest improvement is seen in botany. I have previously had to report on the large number of failures in this subject, but students are evidently giving it more attention, as they are now much better prepared than in former years. Chemistry, however, still remains the subject which presents the greatest difficulty to the student, yet it is one the importance of which cannot be exaggerated, as it plays such an important rôle in pharmacy. There is such a decided improvement this year that we may well look for the cause. It is so coincident with the increased examination-fee that it is probably due to the influence of this preventing students presenting them-

selves before the Examiners until they consider they are sufficiently prepared. It was evident that formerly a certain proportion of candidates appeared on the off-chance of passing, or to see what like the examination was. I am strongly of opinion that were a compulsory curriculum instituted there would be a still more marked improvement, as it would thus compel the student to undergo a thorough systematic education in recognised schools of pharmacy, and would prevent that waste of energy by which students, during a three- or six-months' "cram," commit to memory a number of facts which they do not understand and quickly forget. I am able to express entire satisfaction with the manner in which the Examiners performed their duties.

The PRESIDENT said the report was a very valuable one, as it showed both the weakness and strength of the examination. He drew attention to the recommendation for the institution of a compulsory curriculum. Although this was not new, there was no doubt a curriculum was very desirable, and would save candidates a great deal of worry and anxiety. It would also save their pockets if candidates had a systematic training before they went in for the examination.

The SECRETARY then read the report of the Board of Examiners for Scotland, which showed that out of three Major candidates two passed, and of 91 Minor candidates 23 passed and 63 failed.

ELECTIONS.

A number of members and student associates were elected, and others were restored to the Society. One name was restored to the Register of Chemists and Druggists, and two diplomas were granted to pharmaceutical chemists who had passed the recent Major examination.

FINANCE.

The report of the Finance Committee showed balances as follows:—

	£	s.	d.
General Fund account	1,468	8	9
Benevolent Fund account	876	16	8
Donation account... ..	117	15	0
Orphan Fund account	318	15	9

—and submitted for payment 913*l.* 3*s.* 8*d.*, made up of *Journal*, 359*l.* 15*s.* 10*d.*; current expenses, 300*l.*; rates, 62*l.* 3*s.* 2*d.*; sundry accounts, 191*l.* 4*s.* 8*d.*

The SECRETARY also mentioned that he had received a telegram from Mr. Hill that 200*l.* would be required for expenses in Scotland.

The PRESIDENT, commenting on the report, said the balance on the General Fund account at the end of the year was less by about 1,000*l.* than it was the previous year. This was accounted for by the loss of Preliminary fees, but the loss was not so great as it would have been owing to the increased Minor fees. In regard to the Benevolent Fund, there had been received a donation of 30*s.*, the balance left on winding up the Liverpool Pharmaceutical Students' Association. The materia-medica cabinet which the Pharmaceutical Society supplied to the Association has been placed under the care of Mr. P. Marsden in the Liverpool University College, for the use of the pharmacy students.

The report was adopted, and a resolution passed authorising the Treasurer to sign a cheque for 200*l.* for current expenses in Scotland.

BENEVOLENCE.

The SECRETARY said that, despite the unpropitious general conditions existing during the past year, and the many calls made on behalf of special charities in connection with the war in South Africa, the Benevolent Fund subscriptions were within 30*l.* of the amount contributed in 1900. There is reason to believe that even a better result might have been achieved if it had been possible, according to intention, to furnish every Divisional Secretary with a list of unpaid subscriptions in his division, and request him to look them up. All that could be done in that way was to send out some two hundred lists to the larger centres, and this was accomplished with much difficulty, late working, and putting aside of ordinary duties. Pressure of ordinary routine work and the smallness of the office staff are thus responsible for the circumstance that nearly

two hundred divisional officers were not specifically asked to canvass for the Fund. During the coming year he hoped to be able to communicate with all his local colleagues, soliciting their aid in obtaining increased support to the Benevolent Fund—support of which it stands urgently in need.

The PRESIDENT said, when they remembered the enormous calls that had been made on pharmacists during the past year, there was reason for congratulation that the subscriptions to the Fund had remained practically the same. The funds of the Salvation Army, he understood, had decreased enormously.

The report of the Benevolent Fund Committee was next considered in committee, after which

The VICE-PRESIDENT, in moving the adoption of the report, said the Secretary's remarks about the subscriptions to the Fund being practically level with the previous year were very gratifying. When all the secretaries had been supplied with lists of members in their districts he had no doubt the revenue of the Fund would largely increase. The Fund had need for a considerable amount of money, as the casual grants had much increased. Where, a few years ago, 400*l.* to 500*l.* was distributed in this way, last year the amount was 1,000*l.* The usefulness of the Fund was much increased by the system of casual grants, whilst the grants enabled a large number of distressed individuals, aided by their friends, to keep going. A sum of 130*l.* was granted to ten applicants, amongst whom were the two unsuccessful candidates at the recent election. The practice of granting aid to such candidates was one, he believed, which commended itself to the members.

The TREASURER thought many of their friends outside did not sufficiently realise the work done every month by the Benevolent Fund Committee. It was of considerable importance, no less than 1,000*l.* being distributed in the past year. Much of the success of the Fund must depend on the efforts of the divisional secretaries, and he would ask their friends in the country not to forget the Fund. There were some men who, retiring from business, ceased all connection with the Society, but he thought that after men had made their pile they should still remember the necessities of their poorer brethren.

Dr. SYMES said he did not think there were many who made their pile in the present day. The grants made rather exceeded the money in hand.

The TREASURER: We want some money to go on with.

The SECRETARY: That is so; grants of 130*l.* have been made out of 127*l.* in hand. A sum of 200*l.* is also owing to capital account.

The Treasurer was authorised to pay the annuitants on the usual quarter-days in 1902.

THE LIBRARY COMMITTEE.

The report of this Committee showed the attendances at the libraries and museums in London and Edinburgh. The school staff attended before the Committee and reported, as did also the Editor of the *Journal*. The consideration of the Carnegie trust scheme was deferred. Sitting as the Research Committee, reports as to the progress of work in the research laboratory were received.

The PRESIDENT said there was nothing in the report to call attention, and asked if any member had any question to put.

Mr. GIFFORD said it would satisfy considerable curiosity if some information could be given as to the *Journal* sub-committee, and as to what was being done in regard to the *Journal*.

The PRESIDENT: I don't know how to answer that question. In what direction do you desire information?

Mr. GIFFORD: There is a feeling that the *Journal* would be better if brought into line with modern ideas.

The PRESIDENT: If you have any recommendations to make, I am sure the Committee would be glad to consider them.

Mr. GIFFORD: It is very difficult to get information on the matter, and as to the work of the Committee.

The PRESIDENT: If you will place any views on the matter before the Committee, either verbally or in writing, they will be discussed.

Mr. GIFFORD: I will do so.

DIVISIONAL SECRETARIES

were appointed, Mr. J. G. Isaac, Neath, for Swansea Boroughs; Mr. J. S. Prior for the Stamford Division of Lincolnshire; Mr. H. E. Ellis, Llanfair, for Montgomeryshire; and Mr. G. B. Wright, Hebden Bridge, for the Sowerby Division of Yorkshire.

The PRESIDENT said there was also a vacancy at Cardiff, but a local meeting was to be held to elect a suitable man. Mr. Sanders, who had resigned, was appointed twelve months ago, and gave great promise. It was unfortunate that he was unable to go on.

TEMPORARY EXAMINER.

The PRESIDENT said a difficulty had arisen in connection with the examinations now being held in London owing to the fact that one of the examiners was unable to remain till the examinations were completed. It was desirable, in consequence, that some gentleman be appointed to act as assistant to the remaining examiners.

A motion was then passed appointing Mr. J. E. Saul assistant examiner during the present examinations.

POISON COMMITTEES.

The SECRETARY suggested that it would be convenient if Mr. Hills were appointed a member of the sub-committee on poisons. There are at present two poison committees—a sub-committee which advises Mr. Martindale, and a special committee whose duty it is to deal with the poison schedule. If Mr. Hills were appointed the members of both committees would be the same.

This was agreed to.

STRUCK OFF.

A motion was carried that the name of Mr. Morris William Jenkins, St. Clears, who had not replied to letters addressed to him by the Secretary, be removed from the list of members.

LETTERS.

One was read from the Oxford Chemists' Association, urging that steps be taken to limit the title of "chemist" to those qualified by examination of the Society to hold it.

The Chemists' Managers' and Assistants' Society sent through its President a general invitation to the Councillors to be present at a smoking-concert on that evening. The letter added that the wish had been expressed by some of the Councillors that they would like to make the acquaintance of the Society, and it was hoped that the opportunity would be availed of.

This ended the public business.

EXAMINATIONS IN EDINBURGH.

WE have received from the Registrar of the Pharmaceutical Society of Great Britain the following list of candidates who were granted certificates at the January meeting of the Edinburgh Board of Examiners:—

Three Major candidates were examined, and the following passed:

Hallaway, Robert Railton, Carlisle.
Henderson, John McGregor, Ayr.

Ninety-one Minor candidates were examined, and the following twenty-eight passed:

Alexander, William, Banff	Martin, Thomas, Arbroath
Appleyard, Herbert, Leith	Merriman, C. E. B., Ilkeston
Backhouse, R. Stubbs, Durham	Palfrey, Thomas A., Selkirk
Blechynden, A., Newcastle-on-Tyne	Paton, Andrew Hunter, Ayr
Chalmers, James, Fraserburgh	Penderleith, J. W., Edinburgh
Clarke, H. J., Stockton-on-Tees	Pool, Robert, Annan
Crane, W. T., Northampton	Rennie, Grace I., Birmingham
Daniel, A. W., Stoke-on-Trent	Smith, Alexander, Macduff
Hamilton, R., Grangemouth	Smith, W., Newcastle-on-Tyne
Hogg, W. S., Musselburgh	Stewart, J. S., Auchterarder
Idris, T. H. Williams, London	Straker, Thomas W., Alnwick
Longstaff, H., Gateshead-on-Tyne	Warmington, F. E., Leamington
Macdonald, W., Inverness	West, David B., Fraserburgh
McPherson, N., New Aberdeen	Wilkie, Peter M., Glasgow

The Presidential Badge.

AT the meeting of the Pharmaceutical Society in October, when the winter session was opened, after Mr. Carteighe had invested the President with the official badge which had been subscribed for as a memento of the Society's Diamond Jubilee, Mr. E. Northway Butt suggested that instead of the blue riband by which it was then suspended, a gold chain should be provided, and he further proposed that this should be composed of links representing the Presidents of the Society from its foundation. The idea was cordially endorsed, and Mr. Butt undertook the task of collecting subscriptions for the links.

A quarter of an hour before the meeting of the Council on Wednesday last, a few of the subscribers met in the Council-room to witness the presentation of the chain. Among those present, besides the members of the Council, were Mr. Lloyd Bullock and Mr. Elias Bremridge (both "founders" and nonagenarians), Mr. Horace Davenport, Mr. Bourdas, Mr. Harold Deane, and Professor Greenish. The chain consisted of twenty-one links, and is a beautiful piece of workmanship. Mr. Butt, who was deputed to act as spokesman, in a few happy sentences explained the history of the chain, and hung it on the President's shoulders. Within a fortnight of the suggestion being made, he said, all the links had been subscribed for, and a week later the work was commenced by Messrs. Watherston. The links bear the names of the respective Presidents, and indicate the years during which they held office. They were subscribed for as follows:—

William Allen, F.R.S., by Mr. Cornelius Hanbury.
C. J. Payne, by subscription.
John Savory, by Mr. A. L. Savory.
Thomas N. R. Morson, by Mr. T. Morson, sen.
Peter Squire by Mr. Peter Wyatt Squire.
William Ince, by the Rev. Canon Ince and Mr. Joseph Ince.
Thomas Herring, by Mr. W. C. Herring.
Joseph Gifford, by subscription.
Henry Deane, by Mr. Henry Deane and Mr. Harold Deane.
John T. Davenport, by himself.
Jacob Bell, by Mr. Walter Hills.
George W. Sandford, by his niece and Mr. Charles Blake.
Henry S. Evans, by Messrs. Evans, Sons & Co. and Evans, Lescher & Webb.
A. F. Haselden, by subscription.
Thomas Hyde Hills, by Mr. Walter Hills.
John Williams, by his brother.
Thomas Greenish, by Mr. T. B. Greenish and Professor Greenish.
Michael Carteighe, by himself.
Walter Hills, by himself.
William Martindale, by himself.
G. T. W. Newsholme, by himself.

Mr. BUTT said he hoped the chain would add dignity to the Society. It might be regarded as evidence that it was not a nonentity, but was doing valuable work for the country.

The PRESIDENT said they had to thank Mr. Butt not only for the happy idea of the chain, but also for the great trouble he had taken on himself in putting it into execution. Wearing it placed on the President a great responsibility. The illustrious names engraved on the links showed that the Society had a great history. All of these were now dead except those now on the Council. One (Mr. Davenport) had passed away within the past few days. He was confident the badge would impress upon their friends the important work of the Pharmaceutical Society. He would do what he could to maintain the dignity of the office while he held it.

Mr. CARTEIGHE said that as Mr. Horace Davenport was with them he would like to express to him the sympathy of the old friends of his father in his recent bereavement. He had been his colleague on the Board of Examiners and also on the Council, and could testify to his extreme kindness, courtesy, and geniality.

Mr. HORACE DAVENPORT feelingly acknowledged this expression.

A vote of thanks to Mr. Butt for his labours was moved by Mr. WALTER HILLS and seconded by Mr. C. B. ALLEN (Vice-President).

IMPORT-DUTIES ON ETHER IN BELGIUM.—By a royal decree just issued the import-duty on sulphuric ether has been fixed at 5f. per 100 kilos., and on acetic ether at 8f per 100 kilos.

Festivities.

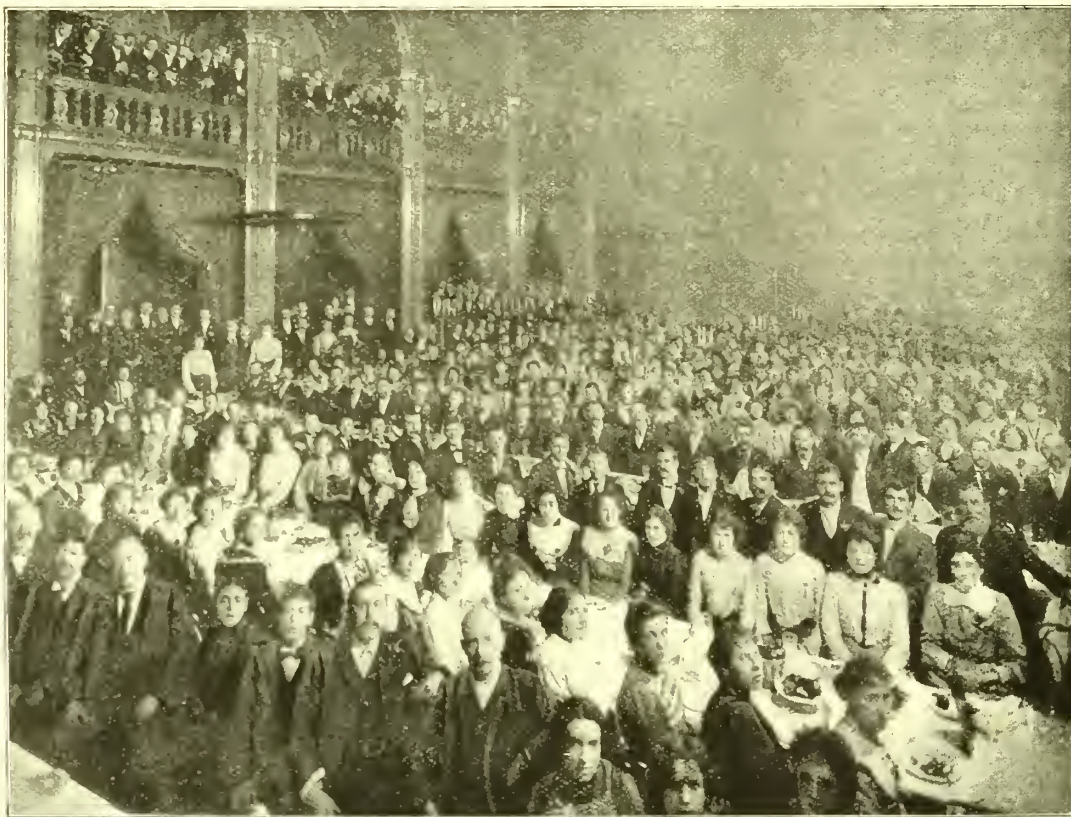
SOME VINOLIANS DINE.

A New Year's dinner was given on Saturday evening, January 4, by the chairman of the Vinolia Company (Limited) to as many of the *employees* of the company as the King's Hall, Holborn Restaurant, would hold. Over 600 members of the staff sat down to dinner. The photograph which we reproduce gives a fair idea of the stupendous size of the gathering. The hall is where the B.P.C. luncheons were held in 1900. The Chairman and Mrs. Burrows received their guests, who presented two very beautiful bouquets and a large basket of fruit to Mrs. Burrows. The Bijou Orchestra played during dinner. The Chairman, in replying to the toast of his health, which had

the past year. The principal representatives throughout the Kingdom were present, and after a genial banquet the whole company adjourned to boxes at the Empire.

MIDLAND PHARMACEUTICAL ASSOCIATION.

The members inaugurated the New Year with a social gathering at the Great Western Hotel, Birmingham, on Tuesday night, January 7. It was a ladies' night, and consequently was of an exceptionally pleasant character. Among those who attended were Messrs. J. Barclay (President), F. H. Alcock and A. W. Gerrard (Vice-Presidents), Dr. Vinzace, J. Poole, C. Thompson, G. E. Perry, C. F. Jarvis, G. H. Brunt (Hon. Secretary), F. Gibson, J. C. Cattell (Knowle), T. Cattell (Sutton Coldfield), A. Harris, W. M. Freeman, H. Jessop, H. Boucher, and others. Mr. Brunt had arranged a programme of great merit. This embraced a pianoforte solo by Mr. J. Tyler; songs by Miss



DINNER OF THE VINOLIA COMPANY'S STAFF, KING'S HALL, HOLBORN RESTAURANT.

been enthusiastically received with musical honours, said that this autumn's business had been the best the company had ever had, and the prospects were never better. His advice to those who were present was to always try and identify themselves with successful houses, and to try at all times to fit themselves for whatever came in the way. In speaking of the company's manufactures he stated that it was significant that in no single district in London was there such a demand for vinolia products as in the vicinity of their works, where their *employees* resided. The company dispersed at 10 o'clock, after having spent a very pleasant evening, not a little of the brightness having been imparted by the professional musical talent engaged for the occasion.

LEMCO REVELRY.

The office and travelling staffs of Liebig's Extract of Meat Company (Limited) were invited by the Chairman (Mr. C. E. Gunther) to dinner at the Trocadero on January 1, to mark the continued success of "Lemco" and "Oxo" during

Florence Showell, Mr. Fred C. Evans, Mr. A. Aldridge; humorous songs by Mr. Frank Costello; a recitation by Mr. T. W. Hussey, and a sleight-of-hand performance by Professor Neale.

"CHARMINGLY GOWNED."

Some of the ladies who attended the Plymouth Chemists dance last week attracted the millinery eye of the *Plymouth Mercury* reporter, who says, "It's a fearful thing for a ball secretary when the men are non-dancers and the ladies will not wear their prettiest frocks!" But this was not Mr. F. Maitland's fate, for "some of the gowns worn were very pretty." Then we are told what was worn by Miss Amy Bosworthick, Mrs. Skardon, Mrs. Roach, Miss Harvey (Ashburton), Miss Hoard, Miss Beryl Sale, Mrs. Crocker, the Misses Strond, Mrs. Hambly, Miss Tierney, Miss Watts, Miss May Header, Miss Mabel Header, Mrs. Fairweather, Mrs. Athan Young, Mrs. Ralph, Mrs. Jarvis, Mrs. Willie Harris (Jarsh Mills), Mrs. Park, and Miss Pomeroy.

Trade Notes.

MR. MATTHEW BELL, 6 Rumford Place, Liverpool, has been appointed agent for Mr. Eugenio Godnig, insect-powder manufacturer, Zara, Dalmatia.

WITH REFERENCE to a paragraph on page 24 of last week's issue, Messrs. Breeze, Jackson & Green (Limited), of Plymouth, desire us to state that their business is wholesale only.

MESSRS. J. DEFRIES & SONS (LIMITED), Gravel Lane and Houndsditch, E.C., who carried out the most important public decorations and illuminations at the Coronation of Queen Victoria, and many National celebrations during her reign, have been appointed decorative illuminators to King Edward VII.

MORGAN'S "HUNGARIAN" PASTE is an article which figures prominently in many City offices, for it does its work well, and is economical. It is sold in 6d and 1s. sizes and in bulk at 3s. 3d. per gal. We may also state that Messrs. W. Sutton & Co., 76 Chiswell Street, London, E.C., have been appointed sole wholesale agents.

NITROGLYCERIN TABLETS.—On page 205 of the Buyer's Guide in the *C. & D. Diary* 1902, the nitroglycerin tablets advertised by Mr. W. Martindale, 10 New Cavendish Street, W., on page 330 are inadvertently indexed as capsules. Mr. Martindale was the introducer of nitroglycerin in tablet form, and we shall be glad if subscribers will note the correction in their copies of the Diary.

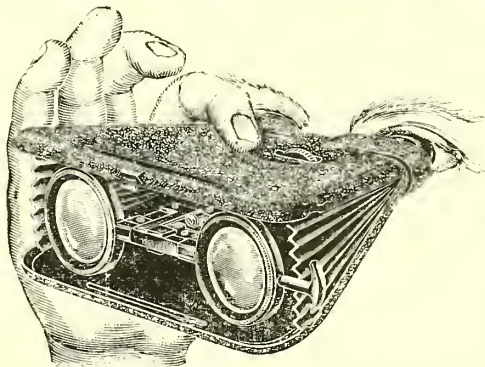
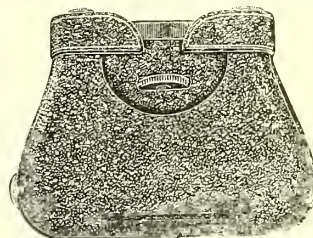
"GREAT BRITAIN'S GREAT BRIDGES" in the *Tatler* this week attracted our attention. They are the Tower Bridge, Clifton Bridge, the Forth Bridge, Owbridge, Tay Bridge, London Bridge, and Menai Bridge. The central one is the largest of the lot, but the pillar labelled "substitution" reveals the hand of an "adsmith," who mars a good idea by not keeping strictly to his text—Owbridge's lung- tonic.

THERMAL CABINETS.—A correspondent in Wisbech informs us that he, his assistants, and two ironmongers in the town have received circular letters from the Century Thermal Bath Company (Limited) offering the "entire control of sales in your district." Those of our own staff who are registered chemists have received similar circulars. Perhaps the company will explain the matter, especially as they state in the circular that they prefer to place the sale of the cabinets in the hands of chemists, and the circular invites every one to whom it is addressed to remit money for a cabinet of double the value. If all respond there will be no exclusiveness about the matter. This is the point that requires elucidation. We cannot explain it.

SOUTHALL-BARCLAY'S LABORATORY REPORT.—We have received from Messrs. Southall Brothers & Barclay (Limited), of Birmingham, an advance copy of their tenth annual laboratory report. We do not recollect reading the previous nine, but understand that this tenth is much enlarged. It is collated from the company's laboratory note-books, and edited by Mr. John Barclay, B.Sc., F.C.S. It is so interesting that we are sorely tempted to reprint some of it in this issue, but so much of our space was ear-marked before the report came to hand that we must content ourselves with giving a general idea of the contents, and perhaps subscribers who wish more details will write to Messrs. Southall Brothers & Barclay for copies. The substantial parts of the contents are analytical records concerning official and unofficial crude drugs, fixed oils, essential oils, and galenical preparations. Examples of the information are:—*Asafoetida*: Ash-yield of twenty-four samples, 12.05 to 66.75 per cent., average 40.6; alcohol-soluble matter, 10.5 to 41.46, average 20 per cent. *Benzoin*: The alcohol (90 per cent.) soluble matter from four samples was 61.04 to 61.1 per cent., average 64.33. Sumatra is, doubtless, meant. It is suggested that the B.P. should order 3 oz. of such stuff to the pint. Out of twelve samples of *Copaiba* eight gave the Gurjun balsam reaction—a statement which is simply astounding. How does an Eastern-Hemisphere product get to South America? In regard to *Oil of peppermint*, useful factors for English, Japanese, American, and Hotchkiss products are given. *Concentrated infusions*: Percentages of total extractive matter for eighteen preparations are suggested, but the

strength of the preparations (1 to 7 or 1 to 9) is not stated. These examples do not include some of the most important information, such as the strengths of belladonna and henbane extracts from last season's crop; but we have said sufficient to show that the report is worth sending for.

A POCKET OPERA-GLASS.—One of the neatest and most compact devices in opera-glasses which we have seen was shown to us the other day by Messrs. F. Darton & Co., 142 St. John Street, Clerkenwell, E.C. It is a flat black-morocco case about the bulk of a cigarette-case, which can be stowed away in one's waistcoat pocket. When it is wanted one unsnaps the catch at the wider end, turns a little swivel at the side, which brings the objectives into position as shown in the second figure. Then one finds that it gives excellent definition, and the pleasure of using it



suggests it as the next present for "her." Anyway, it is called "La Mignonne," and the wholesale price is 25s. Chemists, whether opticians or not, should be able to do business with it.

Calendars for 1902.

Messrs. Howards & Sons, manufacturing chemists, Stratford, Essex, issue a neat but effective calendar printed in black and gold on substantial white cardboard.

The card-calendar sent out by the Erasmic Company (Limited), 117 Oxford Street, W., is in the form of a very pretty showcard. The centre is occupied with an idealistic landscape, and surrounding it are life-sized and life-like pansies.

Messrs. W. H. Willcox's (Limited) "Date Remembrancer" for 1902 has a month's calendar on each leaf, and is ornamented with illustrations reminding the user of the goods made by Messrs. Willcox, such as the semi-rotary pumps, boiler-fluids, and lubricating-oils.

Spong's household almanack and directory of Biggleswade, issued for the fifty-second year, reaches us from Messrs. Spong & Son, chemists, Biggleswade. The almanack is a substantial publication with plenty of local information and advertisements, and is a credit to Messrs. Spong, who print as well as publish it.

Mr. S. Ell, chemist, Dunster, prints his illustrated almanack, diary, and advertiser, on pink and white paper to enable the different sections to be readily found. The half-tone engravings are of Dunster High Street, with the Castle and Mr. Ell's shop, the home of Dunster marmalade. Mr. Ell's portrait appears on the front of the almanack.

Messrs. Pilchers (Limited), Morgans Lane, Tooley Street, S.E., are sending out with their very convenient pocket diary for 1902 an equally useful tint-book which shows the tints of sixty-nine paints which they manufacture, with the name of the tint in each case. The book goes into one's pencil-pocket, and will be found a great convenience by paint sellers or users. The paints have a beautiful enamelled surface.

The Australian Federal Tariff.

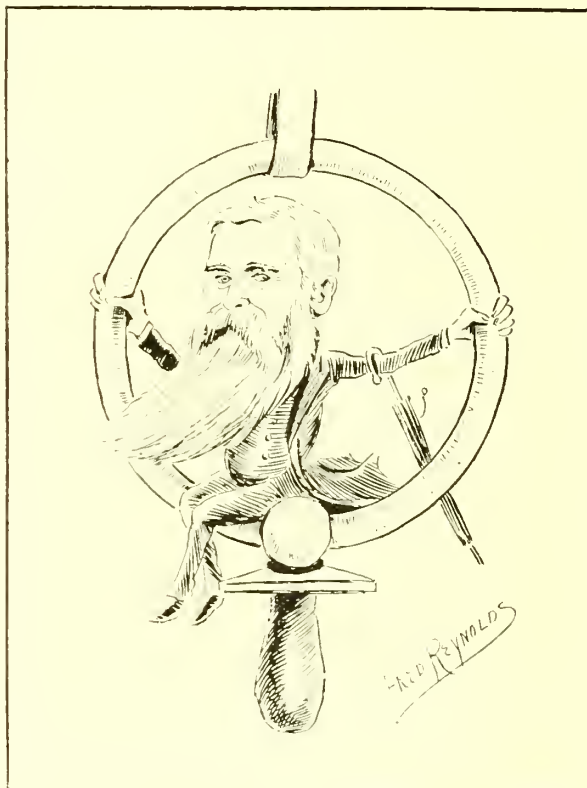
THE following amendments have been made after a keen debate on nearly all the items by the House of Representatives:—

	Schedule	As amended
Spirituous compounds, which include bitters, essences, fluid extracts, sarsaparilla, tinctures, medicines, infusions, toilet-preparations	14s. gal. proof or under	If not containing more than 25% proof spirit, 3s. 6d.; 50% „ 7s.; 75% „ 10s. 6d.; gal.; over, 14s. 30s.
Opium lb.	20s.	30s.
Candles, &c., stearine, paraffin wax, &c. lb.	1½d.	1d.
Cocoa - butter, caramel and caramel-butter lb.	2d. and 15%	1d.
Confectionery, &c. „	2d. and 15%	2d.
Canary, hemp, and rape seed ...	15 „	1s. 6d. cental
Soap, perfumed lb.	4d.	3d.
„ n.e.i. and polishing „	1d.	½d.
Honey, preserved ginger, &c. „	2d.	1½d.
Lime-juice and other fruit-juices and fruit-syrup, non-spirituous	gal.	9d.
Linseed cental	2s.	2s.
If used for making oil ...	2s.	free
Mustard seed lb.	2d.	„
Oilmen's stores, special preparation of infants' and invalids' foods „	20%	„

The change in the duty on seeds was done at the instance of a Government supporter, who said it was "more convenient." The effect is that it somewhat raises the duty on canary seed, the article most dealt in, and reduces the proportion on hemp and rape seed, the latter being largely produced locally. An important alteration is made in the wording of oilmen's stores. As stated, infants' and invalids' foods are made free, and the words "*when in packages for retail sale*," are now omitted. The intention was not to give a bonus of 20 per cent. for the mere packing of goods, but in practice it appears the Customs officers now consider such articles as whiting, cream of tartar, tartaric acid, &c., dutiable at 20 per cent. On the item "opium," including, as regards smoking opium, the weight of the immediately containing package, 20s. per lb., considerable discussion took place. In Western Australia the duty had been 30s. in New Zealand, 40s. Western Australia, under the local tariff, had received a revenue of 3,247l. from this item alone, whilst the Federal Government at 20s. expected to receive 2,000l. from that State. The increase to 40s. a lb. in New Zealand led to decreased consumption and increased revenue. Sir George Turner held that an increase in the duty would only encourage smuggling. The duty was then raised to 30s. per lb., which will be charged on the covering tin as well as the opium. As regards extracts of opium, used medicinally, the duty will be raised proportionately, but the Minister of Customs undertook that opportunity should be given for considering the matter in connection with medicines. It was pointed out that the high duty would encourage the local production of opium, and the Federal Government could not stop the consumption of this article.

MEXICAN QUICKSILVER.—*La Tierra de Mexico* states that quicksilver occurs in Mexico in various places in small quantities. The most important districts are Guadalcázar and Huitzuco, in the States of Guerrero. In the former locality it occurs in calcareous rocks of the cretaceous age, where it forms veins and impregnations; the age of the formation and nature of the deposits being similar to those in California. The production for 1900 amounted to 335 metric tons.

"C. & D." Nursery Rhymes.



A Lullaby.

Hush-a-bye, baby! up Winsley Street
Mother will hurry and buy you a teat;
Get you a soother, with ring or with ball.
Sing you of Sanger and soother and all.

Hush-a-bye, baby! in the same street
Mother will purchase a bottle so sweet—
Bottle "old fashioned," or bottle quite new.
Sing you of Sanger and feeder and you.

Hush-a-bye, baby! that very street
Is where they give you a powder-puff neat—
Puff-box and powder, both big ones and small.
Sing you of Sanger and powder and all.

Hush-a-bye, baby! that is the street
Where all the nice things you wish for we meet—
Pilches, protectors, and perfumes at call.
Sing you of Sanger and sundries and all.

In the Interest of Science.

WHEN one's friend is a scientist and given to experiments, a little caution may not be out of place before consenting to do him a little favour. That, however, did not occur to a certain well known public man, whose experience is thus related. He went to the laboratory of an old school-mate, a professor of chemistry, to make a friendly call. The professor was studying a dark-brown substance spread out on a sheet of paper. "I say," he cried, when greetings had been exchanged, "would you kindly let me place a bit of this on your tongue? My taste has become vitiated by trying all sorts of things." "Certainly," responded his accommodating friend, and he promptly opened his mouth. The professor took up some of the substance under analysis and put it on his friend's tongue. The man worked it around his mouth for fully a minute, as though it were something choice. "Note any effect?" asked the professor. "No—none." "It doesn't prick your tongue?" "Not that I can detect." "I thought not. There are no alkaloids in it, then. How does it taste?" "Bitter as gall." "Hem—m—m! All right." By this time the visitor's curiosity was aroused. "But what is it?" he inquired. "I don't know. That's what I am trying to find out. Some one has been poisoning horses with it."

Observations and Reflections.

By NRAYSER.

The Place to Spend a Happy Life

for pharmacists is now Queensland. A new Pharmacy Act had passed second reading and Committee in the Legislative Council of that colony when the December number of the *Chemist and Druggist of Australasia* was published, and no doubt it is now in operation. The Act, as drafted by the Queensland Pharmaceutical Society, had grouped all the demands which our most clamorous advocates here and there have been formulating for years past as "only bare justice." The curriculum, reciprocity, the division of the examination, companies to be persons, power to de-register licentiates for "infamous conduct in a professional sense," limitation of the rights of executors to carry on businesses, and a 20% penalty on anybody not a pharmaceutical chemist who should "carry on or attempt to carry on the business of a pharmaceutical chemist . . . or use or exhibit any title, term, sign, or symbol, which may be construed to mean that he is qualified to perform the duties of a pharmaceutical chemist," were, and, with only slight limitations, still are among the objects provided for. The provision in regard to signs and symbols is intended, I suppose, to cover coloured bottles and gilt pestles and mortars, and would be comprehensive enough, I should think, to satisfy North-East Lancashire; while "the business of a pharmaceutical chemist" is a description so vague that it will only get defined after a few dozens of actions.

The Legislative Council

has made only moderate modifications in the Bill. The pharmacists had secured the support of the Government, the members of which, however, had apparently only superficially acquainted themselves with the proposals, but their best friends were two or three medical members of Council who flew at the measure with jealous invective. This secured the sympathy of the lay members. One of the latter, referring to certain medical criticisms, said he hoped it would extend the powers of chemists. They often did more good than the doctors did. The medical section, however, got a definition of pharmaceutical chemist into the Bill. Their object was to prevent his assumption of any medical authority. They fixed him as "a person skilled in the business of the preparation and preserving of drugs, and of compounding and dispensing medicines according to the prescriptions of medical practitioners." Whether this description will interfere with his monopoly in the sale of medicines remains to be seen. They also resisted the phrase "in a professional sense" in the deregistration clause, and got the words "in respect of his calling as a pharmaceutical chemist" substituted.

The Government

insisted on the insertion of a clause in favour of joint-stock companies. The right of friendly societies to dispense for their own members by the aid of a qualified person had already been conceded. In regard to companies it was first proposed that "the majority and at least three of the directors of any company carrying on the business should be pharmaceutical chemists," but this was abandoned, and now it is provided that no name of an unqualified person shall appear in the title of such company, and that the name of the qualified manager shall in all cases be used. Details regarding examinations, registration, reciprocity, and the administration of the Act are entrusted

to a Board of seven pharmaceutical chemists, four of whom are to be nominated by the Government, and there is to be an appeal from any of the Board's decisions to the Home Secretary only.

The Late Mr. J. T. Davenport

has not been seen much in pharmaceutical circles in recent years, and he must have been personally unknown to the majority of the present generation of pharmacists. The last time I saw him was in Bow Street Police Court in 1892, when he was summoned for selling chlorodyne without a poison-label. He was a singularly handsome, aristocratic-looking man, and it was almost pathetic to see him press his way toward the bar when his case was called. His counsel stopped him, and the Magistrate kindly remarked, "Your presence in the court is sufficient, Mr. Davenport." The action was taken by the Treasury to test the law, but I found Mr. Davenport specially indignant against the Pharmaceutical Council on account of it. To be summoned to a police court was a bitter experience for him. Chemists nowadays have to reckon on an occasional appearance in a police court as an almost necessary condition of their business career, so that we can hardly appreciate the sensitiveness of the past generation. Mr. Davenport was a fine specimen of the chemists of the pre-legislative era. He was cultured, refined, and high principled, and a master of his business. I am not sure that examinations have improved on the model. In the obituary notice published last week, I think I detect the intervention of the shorthand writer. Mr. Davenport is said to have been "one of the first to make skilled preparations." "Skilled," I suspect, was a substitution for "scaled."

The Man with the Mandate,

he who worketh without noise, the self-appointed apostle of organisation, is taking off his coat. He is not going to be the shuttlecock of pharmaceutical journalism much longer. He certainly will not rest until some few things—I am not quite sure what—are accomplished. On the way to his end he lends a hand to the organisation of London. The federation of London Associations, he says, presents no difficulty because of their proximity. Which is proximate to which? Surely the subjunctive future would be more correct than the indicative present in reference to such a federation. Just now we might as well talk of federating chaos. I am not consciously burlesquing Mr. Lord Gifford's manifesto. I simply cannot understand it. We all want the same things he appears to aim at, but we do not denounce one another because they are difficult to get. Mr. Gifford's policy is as misty as his arithmetic. He had nearly twice the voting strength of any other official candidate, he says, at the last Council election. He had 1,595 votes; there were two other unofficial candidates with over 1,500, and six with over 1,000. How is this for accurate? Aspirations and arguments may sometimes be stated ambiguously; but a controversialist who is loose with his statistics is hopeless.

A National Sanatorium

is, in the King's opinion, the best investment which can be made of 200,000*l.* for the benefit of the poor. It is, I think, a wise decision. The utter defeat of tuberculosis in this country, which his Majesty evidently and intelligently aims at, will be a glorious achievement, and will by itself render his reign illustrious. It is recognised by all competent authorities as a possible purpose, and it is doubtful if anyone could suggest any other which would spread so much happiness. I should have thought four smaller sanatoria in various parts of the Kingdom would have been better than one large one, but perhaps the adoption of the latter is not final. This grand endorsement of fresh air as the rational treatment of consumption will give it a new impetus, and will thus multiply the good effect of the generous donation.

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Finest LIQUORICE JUICE	1/10 * lb.	Finest ARROWROOT	1/ lb.

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Editorial Comments.

Pharmaceutical Affairs.

IN these days of balls, concerts, dinners, and pharmaceutical teas all the elements of the "craft" blend themselves into a harmonious melody which deadens interest in anything that savours of polemics or politics. Yet some good Samaritan is ever ready to blow the placid surface into a mimic storm. How dull matters would have been lately if "Xrayser" had not tilted at a windmill, as some one has expressed it, although it is not a happy simile for the London Chemists Association. His criticism has done the proposed organisation the best possible service, we fancy, by drawing attention to it. Mr. Pentney and Mr. Pond have helped to keep up the game beautifully, and if the Association does not emerge from the ten-shilling room a strong and likeable bantling it will not be through lack of judicious and cheap advertisement. As this mild sensation threatens to pass into everlasting night Mr. Lord Gifford emerges in Venus-like splendour from the nocturnal shade which has recently overshadowed him. He has followed up his epistle of last week with two interventions at this week's Council-meeting, and although neither exactly covered the mandate, they are timely evidence of activity. It is only by work done publicly in the Pharmaceutical Council that we can judge what the members are doing, although most of the work is believed to be done in committee. This is what Mr. Gifford referred to in his letter when he said that members of the Society "ought at least to have sufficient information to enable them to form an intelligent opinion" of what is done by the Council. The most important business done by committees is really never, or but rarely, made public until it is settled. Sometimes members of Council are as poorly informed as outsiders. Take, for example, the Poisons Schedule inquiry. At the November meeting Mr. Southall asked if the Council was to be asked to give evidence before the Committee. "Oh, yes," said the President, "that matter comes later on," and a few minutes

later be told the Council that as a result of the Watch Committee's deliberations the President, Vice-President, Mr. Carteighe, and Mr. Cross were appointed to procure evidence and appoint witnesses. We take this as a tolerably good example of the way Council-business is done. It will be noted that the committee met and disposed of most important business without giving the Council, as a whole, the slightest opportunity of expressing an opinion upon it. The Watch Committee exists to transact urgent legal or Parliamentary business, and consists of the President, Vice-President, Treasurer, and London members of the Council, altogether nine members, including, undoubtedly, some of the most experienced councillors. It cannot, surely, be advantageous to have such matters settled without reference to the Council when urgency is out of the question? The Council met on November 6, and "the President or other competent representatives of the Society" were requested to attend the Privy Council Office on November 19, so that there was ample time for the whole Council to consider the matter and decide what should be done. We give this as an example of Council work, for which every member of it is technically responsible, and gets the credit of—if any is going. It is not a solitary case, and we dare say if Mr. Lord Gifford spoke out with his wonted plainness, he would say that when he comes to London every month he finds things cut and dried past alteration or interference. It will be seen, therefore, that the Council has become subordinate to its own committees, for its approval to most of the reports is a mere formality. If the members had in the General Purposes Committee, which meets the night before the Council-meeting, the opportunity of a preliminary review of the whole of the next day's business, or were each member supplied with a general statement of the business to be transacted, the danger of committee-government would be minimised. Probably such government is best, but the members of the Society do not return new members for that sort of thing. And this brings us to the point of these observations. Two months hence the customary declaration that seven members retire from the Council will be made. The retiring members are eligible for re-election. They are Messrs. Carteighe, Young, Harrington, Park, Harrison, Glyn-Jones, and Southall—to name them in the order they were on the poll in 1899. It would be too much to expect that these gentlemen will be returned unopposed. But, may we ask, on what ground any one of them should be rejected? There is no use displacing any except by men who will bring to the Council new or better ideas and methods, and who will devote to their work individuality which will leave its impress on the Council. The matter is sufficiently important to think over.

Otto of Rose.

THE otto-of-rose industry has attracted considerable attention recently, and several attempts, more or less of an experimental nature, have been made in other localities than the Balkans to cultivate the rose for distillation. The fact that the Balkan district, on account of its purely natural advantages, is *par excellence* the rose-garden of the world is sometimes overlooked in dealing with the question, and there is a disposition to accept too readily statements in regard to the impurity of Bulgarian otto. Undoubtedly the industry has suffered from great disadvantages, for that sophistication has existed long enough in Bulgaria to be traditional is true, and the fact is taken advantage of by dealers outside Bulgaria, who "reduce" pure ottos to suit market-prices. On this point a correspondent has something

to say in this issue. It may also be noted that although the rose is one of the most delicate of flowers, the methods of distillation adopted by the Balkan peasantry are frequently as rough as they can be; and if Bulgaria is to meet the severe competition which is threatened by synthetic rose and general vilification of Bulgarian trading-methods, the industry must be thoroughly modernised—first by the use of improved stills. We have reason to believe that such improvements are being seriously considered by leading distillers, and the sooner they are carried out the better for Bulgaria.

These observations are induced by the perusal of a report which has just been presented to the French Minister of Agriculture by M. J. Gravereaux, who had collected some 800 kinds of wild roses in his rosery at Haÿ, and was asked by the Minister to visit Bulgaria and report on how roses are cultivated and otto distilled there, evidently with a view to attempt to put the rose-industry on a better footing in France. M. Gravereaux points out that France imports over 30 per cent. of the whole of the Bulgarian crop of otto, England coming next with over 20 per cent.; America (apart from Constantinople, which is merely an intermediary) follows with about 15 per cent., the remainder being chiefly divided between Germany, Russia, and Austria. M. Gravereaux states that the average value of the otto produced in Bulgaria is from 800f. to 1,000f. per kilo., and that one of the principal reasons of adulteration is this low price. Here he is in error, for the lower of these values, and the higher much more so, cover the profitable selling-price of the purest Bulgarian otto. Values do undoubtedly vary with the season; but to say that sophistication is practised because the trade-prices are not remunerative to the distillers and first-hand sellers is a travesty of the truth. Price-influence is practically the same as that which induces the great adulteration of lavender oil in France or lemon oil in Sicily, being independent of the cost of production. So long as too eager buyers attempt to get more than true value for their money so long will adulteration of all essential oils be practised by unscrupulous dealers. The bulk of M. Gravereaux's report is a superficial description of the conditions of rose-growing in the Balkans. He says, "To stimulate the zeal of our compatriots may we not add that Germany has made numerous efforts in this direction? We know, too, that Russia has made plantations of roses in the Caucasus," &c. He thinks Algeria and Tunis lend themselves in a wonderful manner to rose-cultivation, forgetting that the quality of the few essential oils which have been produced in Algeria—geranium oil, for example—compares badly with those produced elsewhere, a circumstance probably due to climatic conditions. Anyway, the reporter suggests that France should make a beginning in Bulgaria by taking a bectare of land in Kazanlik, the chief centre of the Balkan rose-production, plant it with roses, and erecting the requisite distillation-apparatus to carry out the experiments which are needful. It is difficult to see what good this would do to France. The results can almost be foretold, and they should largely benefit the Bulgarian industry. We should have thought that experimental cultivations in the places where it is proposed to grow for distillation in France or her colonies would have been more appropriate, since the avowed object of the inquiry was to enable France, as the largest consumer of otto, to produce cheaper otto than that now manufactured in France. It is true that the French otto differs materially in odour from Bulgarian, and many prefer it, but the superiority in odour is not at all commensurate with the difference in price between the two kinds. M. Gravereaux thinks that French otto would be cheaper if

the manufacturers aimed to produce otto of rose rather than rose-water; for otto, he says, is really a by-product. It is apparent that a great deal more information than M. Gravereaux has collected must be available before French growers and distillers can embark upon competition with Bulgaria in this matter.

The Production of Arsenic.

THE arsenic industry in this country has fallen upon evil days. Recently Devon Great Consols (Limited) have closed their mines, which were the principal source of the world's supply. This has not so far materially influenced the value of arsenic, and not until the existing stocks, estimated at over 3,000 tons, are worked off, are we likely to see much higher prices. The circumstances which have led up to the closing of the mines and the liquidation of the company may be briefly stated. The Duke of Bedford, who is the ground-landlord, has refused to renew the lease of the mines, which has only five years to run, but he has found employment for many of the miners. In the circumstances liquidation of the company seemed not only desirable but necessary. The company had lost 4,608*l.* on the year's trading, and at the recent liquidation meeting one of the directors stated that the company had been losing 100*l.* per week owing to the fall in the price of arsenic. Moreover, the company were unable to find a buyer for the 1901 production, the consequence being that it was pawned with the bankers. The bank has now given notice of foreclosure. It is quite probable the creditors of the company will be paid 20*s.* in the pound, but the shareholders are not likely to get anything. It may also be mentioned that the mine, which was formerly a very rich copper-producer, has afforded dividends amounting to about 120*l.* per share. The only other arsenic mine in England belongs to the Devon Gawton Company (Limited), who have just had to borrow 5,000*l.* to carry on business. They have discharged many of their miners, and all underground developments have ceased pending a revival in the arsenic trade. They also have been unable to dispose of their production. Indirectly the consumption has been affected by a severe drought in Australia during the last two years, which has depleted the stocks of sheep.

Arsenic during recent years has been subject to wide fluctuations in value, the lowest price on record being about 5*l.* 5*s.* per ton, and the highest 20*l.*, these figures applying of course to contracts made with the producers. During the last nine years the average price has been 14*l.*, but in the last five years it has been 16*l.* per ton, and to-day it stands at slightly below that figure. In the present uncertain state of the market consumers are only purchasing for actual requirements, and the fact that the liquidator of Devon Great Consols (Limited) is prepared to receive offers for the whole or any part of the property shows that developments may be in progress. As a producer of arsenic Portugal stands second, and it is said that one firm there has now in stock 1,500 tons, holding it for a higher price. A considerable proportion of the Portuguese output is sent to this country, and the production has increased of late. Within the past few years Australia has also sent us shipments, but only when the home-values were high—say 20*l.*; they have now ceased. Italy, Hungary, and Germany also produce arsenic, but mostly for home consumption. In Canada considerable interest has been shown lately in the exploitation of arsenic production in connection with gold-mining, and an earnest effort is being made by interested parties to have bounties placed upon its production by both the Federal and Provincial Governments. A meeting of citizens was recently held in the town of Actinolite, and an

address asking for the bounty was sent to the Minister of Finance at Ottawa. The plea is made that the arsenic required in both the United States and Canada ought to be supplied by Canada, and it is argued that the Dominion is in a better position to supply this trade than Great Britain or Europe, especially as at present no arsenic is produced commercially in the United States. As showing the extent of this industry, we may state that in 1900 there was imported into the United States (according to official figures) 3,145 tons, valued at \$333,100, against 4,705 tons, valued at \$415,000. Canada during the four years ending 1898 imported 933 tons, valued at \$82,000. There is only one arsenic-works in Canada, the capacity of which is 1,000 tons per annum, but if the bounty is granted (which is probable), the output could be increased to 5,000 tons. Hitherto Great Britain has supplied the bulk of America's imports, and it is but natural that the bounty scheme should be viewed with disfavour on this side of the water. At the best there is only a limited use for arsenic, so that the consumption will need to be cultivated. It is asserted that arsenic can be produced in Canada at less cost per ton than anywhere else, owing to the fact that the ore is auriferous as well as arsenical.

THE ALABONE TREATMENT.

Referring to the paper on the treatment of tuberculosis which was given in abstract in the *C. S. D.* last week, Mr. Edw. W. Alabone writes to the *British Medical Journal* that it was contributed by Mr. M. Anslow Alabone entirely on his own responsibility, and adds:—

I know nothing whatever of my son's treatment, and he little more of mine; his statement, therefore, that he has been conversant with my treatment for many years is not only misleading but perfectly inaccurate, although, as he observes, he has seen many cases of phthisis which were deemed hopeless recover under my treatment, but which were not under his "individual" professional care.

I could point out many errors in your criticism of my treatment, and it is hardly fair to ignore the numbers of cases of authenticated cure; but, as an act of justice, might I ask you to defer further judgment till my own treatment—and not that of my son's—has been fully tested—which will shortly be the case?

This letter is a revelation. The younger Dr. Alabone took part in the *Times* controversy entirely in defence of his father, and at the risk of bringing himself into professional disrepute. To be thrown overboard by his father now is hard.

WHISKY-AGEING.

Dr. Hewitt, of the People's Palace, is the man of the week so far as the London newspapers are concerned. Yet his announcement regarding the use of sodium phenyl hydrazine sulphonate was anticipated by Sir Lauder Brunton and Dr. Tunnicliffe about a year ago (see "The Science of Pick-me-ups" in *C. S. D.*, March 30, 1901, page 522). The present warm reception of the suggestion is doubtless a tribute to the excellence of the Society of Chemical Industry as a means of publicity. Anyway, Dr. Hewitt has been well talked about, and many interviews have resulted. In one of them Mr. Richard Stallard, of Stallard & Co., Albemarle Street, stated that Mr. J. Lloyd Ballock, pharmaceutical chemist, 3 Hanover Square, who is now 90 years of age, spent many years in trying to discover a quick method of maturing whisky, and in the end came to the conclusion that the one and only satisfactory method is that of bonding for a number of years. He was able to eliminate all the injurious substance, but the whisky would not keep, and had to be drunk directly it was made. It simply became spirit of wine, with no flavour of whisky.

M.P.S.'s, LOOK OUT.

Messrs. P. Morison & Son, S.S.C., legal advisers to the Society in Scotland, write to the *British Medical Journal*

giving an emphatic denial to a suggestion which had been made by a correspondent of the *B.M.J.* that the Council of the Pharmaceutical Society and the Registrar do not administer the law impartially. In their letter they say: "Let 'Scrutator' send the Registrar *or us* evidence justifying the prosecution of any member of the Pharmaceutical Society or his unqualified assistant for a breach of the law, and *we undertake* that, in the interest of the public, proceedings will be taken against the offender." Something of the *Ego et rex meus* about that proclamation.

SANATORIA FOR TUBERCULOSIS.

Sir Ernest Cassel has placed at the disposal of the King 200,000*l.* for charitable or utilitarian purposes, which his



SIR E. CASSEL, K.C.M.G.

Majesty has decided to devote to providing a sanatorium in England for the open-air treatment of tuberculosis. Sums of 500*l.*, 200*l.*, and 100*l.* are to be devoted as money prizes for the best essays and plans for the erection of a suitable sanatorium. An advisory committee has been appointed, consisting of Sir William Broadbent, Bart., K.O.V.O., Sir Richard Douglas Powell, Bart., K.C.V.O., Sir Francis Laking, K.C.V.O., Sir Felix Semon, Sir Hermann Weber, and Dr. C. Theodore Williams, and essays, with the necessary constructive plans, are to be sent in not later than April 15, 1902, to either Dr.

P. Horton-Smith (15 Upper Brook Street, W.) or Dr. J. Broadbent (35 Seymour Street, W.). The following clauses from the conditions show the scope of the essays:—

1. Medical men of all nationalities may compete. The papers may either be the work of a medical man, or the joint production of a medical man and an architect.
2. The sanatorium is intended for 100 tuberculous patients—50 male and 50 female.
3. Of the total number of beds, 88 will be assigned to the more necessitous classes, whilst 12 will be reserved for the well-to-do.
4. The accommodation for all patients is to be comfortable, a separate room being provided for each. Superior arrangements to be made for the more wealthy patients.
5. It may be taken for granted that the sanatorium will be erected on an elevated and sloping site, with a sunny exposure, and well sheltered from cold winds. It will have a farm at a convenient distance, and be surrounded by extensive grounds, well-wooded, and affording ample space for exercises of various kinds. The soil will be dry and permeable, and the water supply abundant.
6. The sanatorium must be fitted with the latest sanitary arrangements, and equipped with all requirements for scientific research. Provision should also be made for the recreation of the patients.
7. Economy in construction will be an important consideration, but it must not interfere with the reasonable comfort of the patients or the efficiency of the institution.

The committee are certainly going to work in a business-like manner, and we have no doubt the fund will be of great benefit to the class—the gentle poor—which it is intended for. Sir Ernest Cassel, who has so generously placed such a large sum of money at the disposal of the King, is a naturalised Englishman who has made his money in finance. The King stood as sponsor to his grandchild last week.

COLONIAL IMPORT-DUTIES.

The Board of Trade have issued a return, ordered by the House of Commons to be prepared last autumn, of the various duties levied upon imports by the colonies and other possessions of the United Kingdom. It is a Blue-book of over five hundred pages, compiled by Sir Alfred Bateman,

and shows with marvellous clearness the diversity of the tariffs of the British Empire. The arrangement of the book appears to be excellent, and gives some idea of the chaos prevailing in the numerous tariffs throughout our possessions. Sections are devoted to paints, colours, varnishes, chemicals, dyeing and tanning materials, oils, fats, resins, &c. That relating to chemicals runs to twenty-four pages, but no summary would convey an adequate notion of the duties, the number of the articles affected and the number of possessions levying duties being too great. The Australian Commonwealth Tariff Bill is dealt with in an appendix, but the rates there given have been superseded by the provisional rates, which are at present under discussion in the Federal House of Representatives. In the appendices will be found useful papers on copyright laws and regulations in force in the Empire and the duties leviable in the protectorates and the territories of chartered companies.

THE CITY'S PUBLIC ANALYST.

Such is the quaint heading that the *Times* gives to a paragraph on the quarterly report of the public analyst for the City of London (Dr. F. L. Teed). The report shows that during the period under review 244 samples of food and drugs were analysed. Of these, 48 samples were adulterated, or 19.7 per cent. Ninety-one samples were taken unofficially, and of these 21, or 23.1 per cent., were adulterated. The remaining 153 samples were purchased with all the formalities of the Acts. The unofficial samples were taken in order to ascertain where adulteration was most practised. Dr. Teed adds that the amount of adulteration disclosed by the quarter's work is very large, but the prosecutions that are taking place will tend to reduce them to a much more reasonable figure. This is altogether a case of the new broom, for during Dr. Teed's predecessor's time food and drugs in the City of London were neither so severely pressed into the service of the public analyst, nor were the Common Council men startled by statements to the effect that adulteration is practised in the City on a very large scale.

Trade-Marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. Dalton, Esq., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form J, cost 1*l.*, obtainable through any money-order office.

(From the "Trade-marks Journal," January 8, 1902.)

- "STEELPHOS" (no claim for "steel"); for a chemical for hardening and annealing metals. By the Steelphos Manufacturing Company, Olmar Wharf, Malt Street, Old Kent Road, S.E. 242,202.
- "ABSORBINE" (no claim for "Absorb"); for chemicals in Classes 2 and 3. By W. F. Young, 68 Monmouth Street, Springfield, Massachusetts, U.S.A. 242,163 and 242,164.
- "HERCULOID"; for chemicals in Class 3. By Evodie Louise Kernick, 85 Stacey Road, Cardiff. 241,705.
- "PETRONOL" (no claim for "Petro"); for chemicals in Class 3. By Reynolds & Branson (Limited), 14 Commercial Street, Leeds. 242,074.
- "MARLOW" (the essential particular) and device for a label; for a medicine. By the Marlow Company, 6 Gilmore Place, Edinburgh. 241,135.
- "GYPO"; for Goods in Class 17. By John Bennet Lawes & Co. (Limited), 21 Mincing Lane, E.C. 242,726.
- "MARVELINE" (no claim for "Marvel"); for marking-ink. By H. Bell, 62 Quay, Waterford. 242,390.
- "FLORITZA"; for perfumery and toilet-articles. By the Vinolia Company (Limited), Malden Crescent, N.W. 241,374.

Legal Reports.

Fertilisers and Food-stuffs Act.

DEFECTIVE SLAG.

AT Leicester, on January 4, Mr. John W. Proctor and Mr. Richard Thompson, trading under the style of Messrs. Richardson & Co., chemical-manure manufacturers, York, were charged with selling slag which on analysis by Dr. Dyer, analyst to the Leicester County Council, was found to be 7 per cent. deficient in phosphates on the third or lowest quality quoted for, whereas the best quality was ordered and paid for. The defence was that when the slag was ordered the defendants did not have it in stock, they sent on the order to another firm, who were in a similar position, and they transferred the order to a third firm, who supplied the basic slag. It was admitted by the prosecution that the defendants had established a well-earned reputation, and that they would not knowingly commit the offence charged. The defendants further expressed their anxiety to rectify any mistake which had been made. They denied that any moral offence had been committed, as they ordered and paid for the best quality to be supplied. The Bench admitted the *bona fides* of the defendants and decided to treat the action, which was the first under the Act which had to come before them, as a test case. They fined the defendants 20s. and 32s. costs.

Sale of Food and Drugs Act.

SWEET NITRE.

AT the Six-mile Cross (co. Tyrone) Petty Sessions, on January 2, Messrs. W. Armstrong & Co., druggists, Grimlex, were prosecuted for having sold a quantity of deficient sweet spirit of nitre. The certificate of Mr. Barklie, county analyst, showed that the article was deficient to the extent of 25 per cent. For the defence it was contended that the spirit could not be kept up to the proper standard owing to the evaporation through frequent use, moreover the bottle sent to the analyst had not been filled, and there was more room for the air to injure it. The Magistrate said if they went into technicalities they would have to get Mr. Barklie to give evidence. At defendants' request the case was adjourned for Mr. Barklie's attendance.

Bankruptcies and Failures.

Re PETER CAMPBELL FORBES, formerly trading as a chemist at St. Andrew's Avenue, Morley.

THE public examination of this debtor took place at Dewsbury on January 7. At the last Court debtor undertook to file certain accounts in fourteen days, and the Official Receiver (Dr. E. E. Deane) now complained that debtor had failed to comply with the order. Debtor said he had been unable to do so as he had not had proper access to the books, and had been occupied with other negotiations. The trustee being unable to dispose of his business for more than 50%, he (the debtor) found a purchaser at 200%. The Official Receiver said that the trustee complained that he was unable to transfer the office to the new owner of the business because of debtor's action. The Registrar pointed out that the agreement made by debtor and his wife with the landlord was not worth the paper it was written on, and that it could not override the trustee's rights. The Official Receiver stated that debtor was trying to get possession of the premises in his wife's name, which was simply an application for his own benefit, and an interference with the rights of the trustee. The Registrar warned debtor that the trustee must not be embarrassed by anyone. He also warned him that an order of the Court must not be lightly treated, and ordered him to file the accounts required in ten days.

Re ARTHUR CLAUDE HOWARD NEWTON MASON, 113 High Street, West Bromwich, trading as a Chemist and Druggist.—The first meeting of creditors was summoned for January 2, at Birmingham, but none attended, nor was the bankrupt present, and the debtor's affairs were left with the Official Receiver to be dealt with in the ordinary way. Debtor attributes his failure to falling off in trade and severe competition. The immediate cause of the petition was the High Bailiff taking possession under an execution. The statement of affairs discloses liabilities 473*l.* 16*s.*

and assets estimated at 300*l.* 14*s.* 2*d.* In his observations the Official Receiver says the bankrupt, who is not a qualified chemist and druggist, was an assistant to his father, who carried on a chemist's and druggist's business in High Street, West Bromwich, till June, 1898. In that month the stock and fixtures were transferred to the bankrupt, in consideration of the payment of 1*l.* a week to his father during his lifetime. The bankrupt estimated that the stock and fixtures were worth 500*l.* as a going concern. The liabilities were paid by his father, who collected the book-debts owing at that time. The bankrupt was left without working capital, and this had been a serious drawback to him. In December, 1900, creditors began to press, and since then he had traded with considerable difficulty. He did not, however, recognise his insolvent position until November, 1901, although the profits for some time past have, in consequence of the severe competition, been insufficient to pay the expenses. In former years the bankrupt's father sent a considerable quantity of goods to India, but the orders had fallen off considerably, and the bankrupt was recently served with a writ for 124*l.* for advertising in the *Indian Daily News*. The bankrupt is unmarried. The following is a list of the principal creditors:—

	£	s.	d.
Acton & Borman, London ...	...	...	2 8 0
Baiss Brothers & Stevenson, London ...	17	3	8
Beatson & Co., Rotherham ...	31	8	4
Bourne, Johnson & Latimer, London ...	9	16	3
Brunner, Mond & Co. (Limited), Northwich	6	3	6
Burrough, Jas. (Limited), London ...	2	11	3
Cuxson, Gerrard & Co., Birmingham ...	6	7	0
Davies, Harry, West Bromwich ...	25	10	0
Domeier, D. Thom, & Co. (Limited), Manchester ...	...	...	2 8 0
Gibson, R., & Son (Limited), Hulme ...	2	14	0
Green, F., & Co. (Limited), Birmingham	1	18	9
Hill, Evans & Co., Worcester ...	...	...	6 7 8
Indian Daily News, London ...	130	4	0
Metropolitan Bank (Limited) ...	10	9	1
Newball & Mason, Nottingham ...	4	13	4
Roberts, W. F., Birmingham ...	9	9	0
Times of India, London ...	10	8	0
Wilkinson, Jas. F., Manchester ...	24	12	11
Wyleys (Limited), Coventry ...	82	13	7

Re WILLIAM LONGWOOD FEWSTER, Westbro', Dewsbury, Chemist and Druggist.—The affairs of this debtor were inquired into at the Dewsbury Bankruptcy Court on January 7. Debtor stated that he started in business nineteen years ago with 20*l.* capital. Some years ago he bought the premises he now occupied at Westtown. He lived at Westbro', Dewsbury, where for some time a business had been carried on in the name of Fewster, chemist. That business was not his, but his wife's, who sold tea, chocolate, &c., and a few drugs, but no poisons, nor anything that a greengrocer could not sell. The few drugs she sold were supplied from his shop at Westtown. He recognised that it was a mistake to have the name of Fewster chemist, over his wife's shop, and he admitted that the labels of his bottles bore the name "W. L. Fewster, Westtown and Westbro'." It had never occurred to him that this was wrong. Orders for drugs for him were left at his wife's shop. The causes of failure was smallness of capital, losses through local strikes, and expenditure in advertising proprietary articles. He had spent hundreds of pounds in advertising. The examination was adjourned to allow the Official Receiver an opportunity of considering the ownership of the shop at Westbro'.

Gazette.

Partnerships Dissolved.

Boam, G., and Thompson, J. W., under the style of Boam & Thompson, Castleton, Derbyshire, mineral-water manufacturers.

Cuppajidge, J. L., and Edmond, W. R., under the style of Cuppajidge & Edmond, Totnes, Devonshire, physicians and surgeons.

Goldhill, B. M., and Goldhill, I. H., under the style of Goldhill & Co., Houndsditch, E.C., sponge-merchants.

Hill, A. B., Yates, R., Hicks, A., and Hill, C. A., under the style of Davy Hill & Son, Yates & Hicks, Southwark, S.E.; so far as regards A. B. Hill and R. Yates.

Howitt, J. F. W., and Cross, G. F., under the style of Howitt & Cross, Downham Market, general medical practitioners.

Hutchinson, W. G., and Grout, J. W., jun., under the style of Hutchinson & Co., Burton-on-Trent, chemical-manufacturers.

King, E. E., and Horden, A. G., under the style of King & Horden, Ludlow, medical practitioners.

Mander, C. T., Mander, B. H., Mander, N. H., and Clarke, H., under the style of Mander Brothers, Gracechurch Street, E.C., and Oxford Street, W., varnish-manufacturers; so far as regards H. Clarke.

Oldham, C., and Jessop, W., under the style of Oldham & Jessop, Wisbech Saint Peter, Cambridgeshire, mineral-water manufacturers.

Rumsey, J. H. W., Idris, T. H. W., Jones, W. A., and Bishop, E. K., under the style of the Sunlight Sensitised-paper Company, The Avenue Works, Great College Street, Camden Town, N.W., sensitised-paper manufacturers and photographic chemists.

Shorthouse, J. H., and Shorthouse, J. W., under the style of Joseph Shorthouse & Sons, Birmingham, manufacturing chemists, &c.

Watson, S. O., and Watson, W., under the style of Spencer & Watson, Newcastle upon-Tyne, chemical-merchants.

New Companies & Company News.

THE E. W. GILLET COMPANY (LIMITED).—Registered in Toronto, Ont., with a capital of \$350,000. To manufacture and deal in groceries and druggists' sundries, and to acquire the business of E. W. Gillett, Toronto.

INTERNATIONAL DRUG COMPANY (LIMITED).—Capital 1,500*l.*, in 1*l.* shares. Objects: To carry on the business of chemists, druggists, dyers, oil and colour men, importers and manufacturers of and dealers in pharmaceutical, medicinal, chemical, industrial and other preparations, makers of chemical, photographic, surgical, and scientific apparatus and materials, &c. The subscribers are:—W. G. B. Sweet, 181 Queen Victoria Street, E.C., merchant; H. Bradley, 307 Clapham Road, S.W., druggist; A. W. Wordley, 20 Champion Park, Denmark Hill, S.E., surgeon; H. A. Hart, "Woodlands," Wootton, gentleman; J. Pilkin, 56 Red Lion Street, Clerkenwell, E.C., philosophical-instrument maker; G. G. Hewitt, M.D., M.B., B.S., 15 Walbrook, E.C.; and A. Croft, 8 New Broad Street, E.C., druggist.

POWER MANUFACTURING COMPANY (LIMITED).—Capital 30,000*l.*, in 1*l.* shares (29,000 "A" and 1,000 "B"). Objects: To acquire E. Power's business of a dental and surgical instrument maker, and to carry on the same and any auxiliary business. The first subscribers are:—E. Power, Churchfield Road, Walton-on-Thames, manufacturer; Mrs. A. E. Power, Churchfield Road, Walton-on-Thames; Miss E. A. Power, Churchfield Road, Walton-on-Thames; E. A. Higgs, Walton-on-Thames, clerk; W. H. Ash, Broad Street, Golden Square, W., merchant and manufacturer; C. J. Ash, Broad Street, Golden Square, W., merchant and manufacturer; and C. Dod, 8 Broad Street, Golden Square, W., secretary. The first directors are W. H. Ash, C. J. Ash, and E. Power (managing director). Qualification, 500 "A" shares. Remuneration of ordinary directors, 50*l.* per annum, divisible; of managing director, 500*l.* per annum.

STANSFIELD BROTHERS (LIMITED).—Capital 1,000*l.*, in 1*l.* shares. Objects: To adopt an agreement with Exley Stansfield, and to carry on the business of manufacturers, importers and exporters of and dealers in soaps of all kinds, soda-ash, soap ash, urine-substitute, sulphur washes, sulphate of soda, tallow, oils, greases, liquid blues, bleaching-preparations, metal polishes and pastes, turpentine, borax, resin, chemicals, chemical, photographic, and scientific apparatus and materials, &c. The first subscribers are:—G. Stansfield, 5 Victoria Avenue, Cleckheaton, traveller; E. Stansfield, Victoria Avenue, Cleckheaton, soap and chemical manufacturer; O. Stansfield, 13 Swinton Terrace, Halifax, engineer; Mrs. M. Nicholson, Kirkgate, Bendall, near Leeds; Miss L. Stansfield, 5 Victoria Avenue, Cleckheaton; Mrs. H. Stansfield, 5 Victoria Avenue, Cleckheaton; G. Rushworth, 20 Albion Street, Cleckheaton, traveller; and W. Firth, Craven Bank Chambers, Bradford, solicitor.

LIEBIG'S EXTRACT OF MEAT COMPANY (LIMITED).—The directors have resolved to declare a half-yearly interim dividend of 5 per cent. on the ordinary shares of this company, being 20*s.* per share, free of income-tax.

HOMOCEA (LIMITED).—At a meeting of shareholders of Homocœa (Limited), on January 8, the old directors resigned and new directors were appointed. It was stated that the recent appeal to the shareholders to take up the debenture-issue was abortive.

Marriages.

DAVIES—HOWELLS.—At St. Peter's Church, Lampeter, on December 26, Richard Llewellyn Davies, chemist and druggist, Clydach, Swansea, to E. J. Howells, of Lampeter.

STEPHEN—ROBERTSON.—At 25 Barony Street, Edinburgh, on January 4, 1877, by Rev. Alexander Williamson, West St. Giles', John Stephen, chemist, Loanhead, to Sarah, younger daughter of the late Roderick Robertson, Edinburgh. (Silver wedding.)

WANDLESS—ANDERSON.—On January 2, at Scotch Street Church, Whitehaven, by the Rev. A. O. Lochore, William Hood Wandless, chemist and druggist, Whitehaven, to Marian, daughter of the late Captain Wm. Anderson, St. Bees.

Deaths.

CHANCE.—On January 6, at his residence, 1 Grand Avenue, Hove, Sir James Timmins Chance, Bart., in his 88th year. Sir James was for many years head of the firm of Chance Brothers & Co., glass-makers, Birmingham. Intended originally for Holy Orders, and afterwards the Bar, he eschewed both and embraced science, made great progress in the art of glass-making, and eventually his firm took first place as makers of glass apparatus for lighthouses. In conjunction with Michael Faraday and the Astronomer Royal he began a work which lasted eleven years, and as a result the dioptric apparatus for lighthouses was devised. He was a warm and practical supporter of education, a genuine man of science, and a large-hearted philanthropist.

CROWDER.—On December 29, 1901, at Edenvale, 177 Lower Addiscombe Road, Croydon, Mr. William Crowder, formerly of Clapton, in his 73rd year. Mr. Crowder was a member of the Society of Chemical Industry attached to the London section, at whose meetings his was one of the most familiar figures. At the Chemical Industry Club on Monday evening his memory was toasted in silence. Mr. Crowder was wont to speak at the meetings, especially when mineral acids were the subject, and his long experience and sound judgment made his remarks well worth listening to. He served on the sectional committee for several years.

DEWAR.—At Dingwall, N.B., on January 4, Mr. Peter James Dewar, pharmaceutical chemist. Aged 83. Mr. Dewar, who was senior partner of the firm of Dewar & Hay, chemists, Dingwall, was born in Avoch, where his father was the Congregational minister. Mr. Dewar started business as a chemist in Dingwall in 1845, and he was for many years closely identified with the public life of the burgh, taking an active part in the educational, religious, and social needs of the day, especially on behalf of the young. The Volunteer movement also received his loyal support, and he filled the various grades of the service up to the rank of captain, by which title he was known to the last. He was a successful business man, having built up a lucrative concern which combined the practice of dentistry with that of pharmacy. He was twice married, and leaves a widow and grown-up family of daughters to mourn his loss. The business is carried on by the surviving partner, Mr. Roderick Hay, a former apprentice with Mr. Dewar, who had been associated with him as partner for some years past.

HAWKER.—On January 1, Mr. Edwin Hawker, of Hawker Brothers, 7 Denman Street, London Bridge, S.E.

KEMP.—At New York, U.S.A., on December 31, 1901, Mr. Edward Kemp, senior member of the firm of Lanman & Kemp. Aged 71.

TAPP.—On January 4, suddenly, at Clapton, Mr. Samuel Tapp, in his 62nd year. Mr. Tapp was well known to the wholesale drug-trade of London, as he was foreman at the London Docks rhubarb warehouse in Crutched Friars for about twenty-two years, from which position he retired in September last. He had previously been with Messrs. Barron, Harveys & Co., and was one of the best judges of rhubarb in the world. He leaves a widow and four grown-up sons.

Winter Session.

Society of Chemical Industry.

LONDON SECTION.

A MEETING was held in the Chemical Society's rooms, Burlington House, on Monday evening, January 6, Mr. Otto Hehner (Chairman of the Section) presiding.

DETECTION AND ESTIMATION OF ARSENIC.

In March last year, when the arsenic scare was at its height, a joint committee of this Society and the Society of Public Analysts was appointed to report upon the best method for the detection and approximate estimation of minute quantities of arsenic in beer, brewing-materials, foodstuffs, and fuel. It consisted of Messrs. Otto Hehner (Chairman), A. H. Allen, A. C. Chapman, C. E. court, David Howard, A. R. Ling (Secretary), R. Messel, and L. T. Thorne. They now recommended the Marsh-Berzelius method, in which arsenic-free hydrochloric or sulphuric acid, zinc, lime, and calcium chloride are required, and Jena glass should preferably be used, as ordinary bottle-glass frequently contains arsenic. Hydrochloric acid is rarely free from arsenic. The pure acid of commerce is therefore diluted to sp. gr. 1.100, coloured yellow with bromine, excess of sulphurous acid then added, and after standing twelve hours about a fifth of it is boiled off, whereby the arsenic is got rid of. If the sulphuric acid contain arsenic, a few grammes of sodium chloride is added to $\frac{1}{2}$ litre of it, and the mixture distilled, the first 50 c.c. being rejected. The rest is diluted with four times its volume of water.

To test for arsenic a 200-c.c. flask or bottle is used, and fitted with a tapped 50-c.c. funnel and exit-tube, the latter being connected with a drying-tube containing a roll of dry lead-acetate paper or cotton-wool (saturated with the same solution and dried), then a wad of ordinary cotton-wool, a layer of granulated calcium chloride, and a wad of ordinary cotton-wool. To this tube is attached a hard glass tube drawn out to a point 0.092 inch in diameter.

Having placed about 20 grammes of zinc in the flask and well washed it with water, dilute acid is run in, and when all air is expelled from the apparatus (a point judged by the hydrogen flame being round) the bunsen burner is placed under the hard tube to test whether a mirror is formed or not, acid being added from time to time. If no mirror is formed in twenty minutes, the test may proceed by the addition of the suspected arsenical material.

Standard arsenical mirrors are prepared by adding hydrochloric-acid solution of arsenious oxide (each c.c. of which contains 0.001 milligramme of As_2O_3) to the generating-flask, first 2 c.c. of the solution, then 4 c.c., 6 c.c., 8 c.c., and 10 c.c., using a new hard tube for each addition. The hydrogen is allowed to come off for twenty minutes before adding the arsenical solution, the bunsen flame being below the tube all the time; the arsenical solution is then added, and the flame continued under the tube for twenty minutes, so that the arsenical mirror may be evenly deposited. The mirror is sealed in while the tube is still filled with hydrogen. The tubes are then mounted on white cards and used for comparison. The estimation of arsenic in different materials was then described. Hydrochloric acid is more sensitive than sulphuric, but whichever is used in making the standards must be used again in the comparisons. Sulphuric acid cannot be used with organic materials without destruction of the organic matter. The following are, in brief, the methods suggested:—

Beer.—Start the apparatus with hydrochloric acid, after ten minutes run in a mixture of 10 c.c. beer and 10 c.c. hydrochloric acid. Test for fifteen to twenty minutes, running in more if necessary.

Malt, Sugar, &c.—Hydrochloric acid and 50 c.c. water warmed to 50° C. are poured on 50 grammes of malt in a separator-funnel. After digesting twenty minutes, about 60 c.c. can be drawn off. Each 20 c.c. contains the arsenic from 10 grammes malt. Use in the apparatus as with beer. Sugar may be dissolved in the acid and water, and used as beer.

To Destroy Organic matter the substance (10 grammes) is (1) heated in a crucible with nitric acid (10 to 15 c.c.), and after brown fumes cease to come off, add 3 c.c. sulphuric acid, heating being continued until the mass begins to char; another 5 c.c. of

nitric acid is added, and heat continued until the mass is nearly dry. It is then extracted with dilute acid, filtered, and Marsh'd. (2) The material is mixed with pure lime or magnesia, dried and incinerated (1 gramme to 20 c.c. beer, or 2 grammes sugar or malt) The ash is dissolved in hydrochloric acid and Marsh'd.

If sulphites or sulphurous acid be present, it must be oxidised by bromine, excess of the latter being removed by heating. To prove that the mirrors are arsenical, replace the hydrogen in the tube with air, seal up and heat until the mirror disappears. On cooling, minute crystals of arsenious oxide are deposited.

The test is of such extreme delicacy that with quantities of 20 grammes or 20 c.c. it will give an indication of one part of arsenious oxide in 7,000,000.

After Mr. A. R. LING (Secretary of the Section) had read the report, the CHAIRMAN made a few remarks which were taken to mean discouragement of debate on that occasion, and Mr. B. E. R. NEWLANDS quickly confirmed that by moving a vote of thanks to the committee, explaining that the report had yet to be placed before the Council. Mr. GORDON SALAMON seconded the motion, and took the opportunity of explaining, as a member of the committee which took evidence at Manchester last year, that the committee were well aware in recommending Reinsch's test that it was not the most delicate, but they then felt the responsibility of adopting so delicate a test as the Marsh-Berzelius one, because at that time, when the scare was at its height, there were practically no beer sent out which would not give some response to Marsh, although they were in no sense pious.

Mr. NEWLANDS then put the motion to the meeting. It was carried, but a few questions were put, and the CHAIRMAN disposed of them by saying that they would all be found answered in the paper. He then called upon Professor J. T. HEWITT, M.A., D.Sc., Ph.D., to read a paper which virtually was on

THE MATURING OF WHISKY.

Dr. Hewitt is well-known to Chemical Society *habitues* on account of his work in organic chemistry, and it has been whispered recently that he had discovered something which would make new, raw whisky as sweet as milk. He had a good innings on Monday evening, first telling the meeting all about the higher alcohols, acids, and ethers in pot-still and patent-still whisky, especially dwelling upon the fact that there are always few fatty acids in the spirit. About a year ago Sir Lauder Brunton showed that the aldehydes, especially furfural, in whisky and similar spirits, are the hurtful constituents, as they produce the splitting headache next morning. The effect of keeping spirits in cask is to reduce the amount of such aldehydes. Dr. Hewitt spoke about the estimation of these, giving it as his opinion that the colorimetric method, by means of aniline acetate, is most reliable, and added figures showing the amounts of aldehydes in Scotch whisky, brandies, Cape smoke, Dop brandy, and the like, but the figures were not startling, as some matured spirits showed bigger figures than raw spirits. He then spoke about the removal of aldehydes, and stated that his discovery consists in the addition of sodium phenyl-hydrazine sulphonate to the low wines still in the course of distillation, the result being that the aldehydes are fixed, and do not come over with the final distillate. This does not diminish the flavour of the spirit, which on keeping in cask for a few months becomes as rich as if it had been kept in them for years.

The discussion on the paper was so long that Dr. Dupré was prevented reading one which he sent in after the programme had been published.

Chemists' Managers' and Assistants' Society.

A goodly gathering of the members of the Chemists' Managers' and Assistants' Society and their friends took place at the Horseshoe Hotel, Tottenham Court Road, W., on January 8. The occasion was a grand smoking-concert, which served the double purposes of promoting social intercourse and holding the annual meeting. Many representatives of the leading wholesale drug-houses were present to support Mr. Frederick Layman, who was in the chair. Before the musical portion of the proceedings began Mr.

C. E. Pickering, who is President of the new Society, read the annual report. In the course of his speech Mr. Pickering told the story of the amalgamation between the Chemists' Assistants' Union and the Chemists' Managers' Association. A new set of rules had been drafted by the provisional committee appointed in October, and these were submitted that evening for the approval of the Society. After alluding to their good fortune in securing Lord Avebury as Honorary President, who would safeguard their interests in Parliament, Mr. Pickering said it was proposed to re-elect the existing Council for the ensuing year. He drew particular attention to the new rules drafted, and especially to those governing the Benefit Fund. The membership subscription has been fixed at 5s. per annum, and evidence of thorough respectability must be given before the membership ticket can be obtained. As a further inducement the ticket entitles the owner to a year's insurance. A programme of half-a-dozen meetings has been drawn up, but that represents only a portion of the work of the Society, which will do its best to help members into situations, and aid in every possible way to raise the general status of the assistant. It is intended that places of pharmaceutical interest will, in the course of the year, be visited by members of the Society, these being arranged for the half-day holidays. He desired to specially draw their attention to the fact that now every branch of the wholesale as well as the retail trade was eligible to join the Society—for which excellent suggestion they had to thank their esteemed friend the Editor of *THE CHEMIST AND DRUGGIST*. The membership of the Society had fallen off somewhat during the past few months, but that was entirely due to the temporary disorganisation resulting in the amalgamation, and he predicted a great future for the Society. The concert programme consisted of songs, recitations, and an excellent series of gramophone-records. The orchestra was supplied by Mr. Rush's orchestra, and some of the songs were sung by members of the Society. "The King" and "The Chemists' Managers' and Assistants' Society" were the toasts of the evening.

London Chemists' Association.

ANOTHER meeting of the committee which has in hand the formation of this Association was held at the Holborn Viaduct Hotel on Wednesday, January 8. There was a full attendance of the members, and, in addition, of three of the new members who have been added to the committee—Messrs. Breese, Goodall, and Truman. Rules were submitted and finally drafted for joint discussion with a committee of the Western Chemists' Association, and subsequent submission to a general meeting of chemists who wish to join the Association. This meeting will be called for January 29.

Manchester Pharmaceutical Association.

AT the meeting held at the Victoria Hotel on Wednesday evening, January 8, Mr. G. S. Woolley (President) in the chair, Mr. J. Grier, of the Pharmaceutical Department, Owens College, was present to read a paper on "Pharmaceutical Education," but owing to the limited number of members present it was postponed in order that the Federation circular on an allied subject may be considered at the same time. The CHAIRMAN, in the course of some remarks on the subject, said one thing which struck him very forcibly was that the education most needed was reading, writing, and arithmetic. If they advertised for a boy nowadays he could scarcely write a decent hand, and if they asked a boy how much three-quarters of a dozen articles came to at 12s. a dozen he was at a loss for an answer. Mr. KIRKBY gave instances of the neglect of the primary forms of education for higher subjects, such as Greek and the higher mathematics, which was proving disadvantageous in many respects. The question of providing refreshments at future meetings was suggested as an attraction, and afternoon meetings were once more mentioned.

Newcastle-on-Tyne and District Chemists' Association.

AN ordinary meeting was held in the Hôtel Métropole on Wednesday, January 8, Mr. Robert Wright, President, in the chair. There was an attendance of over thirty.

Mr. ARTHUR PAYNE, F.C.S., President of the Blaydon Camera Club, delivered a lecture on

CHROMATIC PHOTOGRAPHY.

The lecture was illustrated with lantern-slides, diagrams, and specimens, many of which possessed great historical value and interest. Mr. Payne explained, with the aid of a spectrum, the difference between the chemical and visual rays of the spectrum, and showed by means of diagrams the gain in colour sensitiveness obtained by using orthochromatised dry plates. The necessity for the use of a light-filter was explained, and the lecturer insisted upon the necessity of adjusting the light-filter to the brand of plate used by means of an Abney's sensitometer. Mr. Payne showed the different ways in which the light-filter may be placed, and said he preferred, for convenience only, to use it in front of the lens or a Thornton-Pickard shutter. He mentioned that focusing must always be done with the light-filter in position, adding that "so long as the plate and light-filter are used together the colours will be correctly rendered in the same luminosity as the eye sees them at the moment of making the exposure." Many slides illustrated his statements. Turning to photography of colours, the lecturer referred to the work of Carey Lea, Colonel Saint-Florent, Lippmann, Du Haumont, Ives, and Joly. The theory of three-colour photography was explained with the aid of diagrams, and the processes were illustrated with lantern-slides in natural colours.

Votes of thanks to the lecturer and Mr. Hughes, his assistant, closed the meeting. Messrs. Dobson (Morpeth) and Hedley (Newcastle) were elected members of the Association.

Chemists' Assistants' Association.

The programme for the second half of the present session consists of the following items:—

- Jan. 9.—Musical and social evening, 73 Newman Street, W.
- " 16.—Paper, "Bee-keeping," by S. Frost.
- " 23.—Short-paper evening.
- " 30.—Paper, "Plant Misfortunes," by R. E. Lowndsbrough.
- Feb. 6.—Impromptu discussion.
- " 13.—Paper, "Some Notes on Medicinal Plants Cultivated in Great Britain," by F. Ransom, Ph.C.
- " 20.—Musical and social evening.
- " 27.—Discussion, "The Best Systematic Methods for the Pharmacist."
- Mar. 6.—Paper, "Phosphorescence," by Professor J. Norman Collie, Ph.D., F.R.S.
- " 13.—Paper by F. C. Shrubbsall, M.A., M.R.C.P.
- " 20.—Annual dinner at Holborn Restaurant.
- April 10.—Paper, "Notes on some Pharmacopoeial Preparations," by E. A. Andrews, Ph.C.
- " 17.—Exhibition and short-paper evening.
- " 24.—Paper, "Glass," by C. Hymans.
- May 1.—Musical and social evening.
- " 8.—Annual general meeting.

Personalities.

MR. A. D. BREEZE, of Plymouth, has been appointed chairman of the Plymouth Mercantile Association.

MR. WILLIAM WRAY HOPKINSON, wholesale druggist, has been elected a member of the Bentley-with-Arksey School Board.

MR. T. H. W. IDRIS is now on a voyage to South Africa. He started from Southampton on December 28 last, and will return by the East Coast route through Egypt.

THE HON. GEORGE T. FULFORD, President of Dr. Williams' Medicine Company, who has been here in connection with the business of that company, left London on Wednesday of this week for Canada.

MISS KITTY HARSTON, the twelve-year-old daughter of Mr. and Mrs. Harston, Burton Road Pharmacy, Lincoln, took honours in Grade II. pianoforte-playing at the recent examination of the Incorporated Society of Musicians.

MRS. THEODORE WRIGHT, who is well known to members of the British Pharmaceutical Conference owing to her exquisite recitations, has accompanied Mrs. Patrick Campbell to the United States as a member of her dramatic company.

PHOTOGRAPHIC NOTES.

KODAK TERMS.

THE new conditions under which Kodak (Limited) are to supply retailers have caused considerable stir in wholesale circles, as well as amongst retail dealers. Wholesalers are no longer to be supplied by the company. This hits them rather hard, not because of the profits they lose, but on account of the fact that Kodak goods bulked very largely in their turnover, and those who profess to supply retailers with everything suddenly find themselves unable to carry out that principle as regards a leading line. The wholesale dealers have met and have resolved upon a line of action—in fact, to continue the fight—for they consider that the company have resolved upon the present step because the wholesalers beat them on the film monopoly scheme.

Messrs. George Houghton & Son, who have been doing over 1,000l. a month with the company, have issued a circular regarding the matter, in which they say:—

"Without a word of thanks for past business or of regret for taking such a step they [the company] give us the curt notice contained in a circular letter issued early in December that in a few weeks' time—viz., January 1—they will dispense with our services as distributors. The business in their goods has been to us not very profitable; but for this we do not so much blame them, as it was, of course, optional to us to give away as much of their discount as we liked to our retailing friends. As is well known, however, we have especially set ourselves out for many years past to supply the retailer with everything that he may require in the way of photographic goods at a very small margin of profit, and we venture to think that our action and that of other wholesalers who have done the same, in giving the facilities we offer, both in terms and in keeping a stock of the thousand and one articles required by amateurs, has been very largely instrumental in popularising photography and indirectly and directly increasing the demand for Kodak as well as other manufacturers' specialities. The question naturally arises, What may the retailer expect when the Kodak Company feel themselves sufficiently strong to treat them in a similar manner? We leave our friends to judge for themselves, aided by the above-mentioned facts."

As it is only fair that the company's view should be given, one of our staff called at their head office and was assured that there is no intention on their part of opening any further retail branches. The company already have five branches in London, and one each in Glasgow and Liverpool. It would not, we were informed, pay the company to open branches everywhere. At the same time our representative was told that the effect of opening a branch near a dealer has been to increase his trade.

"LITTLE NIPPER" COMPETITION.

We have received from Messrs. W. Butcher & Sons the following list of prize-winners.

Class A.

First, 2l. 2s., W. H. Wills, 13 Tudor Road, Leicester.
Second, 1l. 1s., G. W. Porte, Skelton-in-Cleveland.
Third, 10s. 6d., Vivian R. Cooq, 45 The Common, Woolwich.

Class B.

First, 1l. 1s., Walter H. Wills, 13 Tudor Road, Leicester.
Second, 10s. 6d., F. Forest, 129 High Street, Guildford.
Third, 5s., J. F. Alexander, 37 Burnbank Gardens, Glasgow.

Class C.

(No. 1 Camera.)

First, 1l. 1s., H. R. Lewis, Seymour Street, Bath.
Second, 10s. 6d., Lallie Dod, 52 Chalsey Road, Brockley.
Third, 5s., G. Axon, 84 Shaw Heath, Stockport, Cheshire.

(No. 2 Camera.)

First, 1l. 1s., Katie King, 53 St. Thomas's Road, Hastings.
Second, 10s. 6d., L. Watts, 29 Evering Road, London, N.

Class D. (No. 1 Camera.)

First, 1l. 1s., Alfred Wildsmith, 2 Well Close Terrace, Leeds.
Second, 10s. 6d., Stanley J. Milner, 3 Bellevue, Clifton, Bristol.
Third, 5s., F. Stuart, 25 Ann Street, Cheetham Hill, Manchester.

(No. 2 Camera.)—First, 1l. 1s., Rev. W. C. Hope, Powys Villa, Park Road, Cowes, I.W.

Class E.

First, 1l. 1s., Kate Dod, 52 Chalsey Road, Brockley.
Second, 10s. 6d., A. R. Osborne, 36 High Town, Hereford.
Third, 5s., Sidney Hicks, 2 Kingston Road, Bath.

Class F.

First, 2l. 2s., Walter Bidler, Cotteswold Road, Tewkesbury.
Second, 1l. 1s., Albert Douglas, 77 High Street, Egham.



TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

"Defence not Defiance."

SIR,—I have read with the keenest interest your leading article in this week's *C. & D.*, and feel assured that you have done yoman service to all registered chemists by calling attention to Mr. R. Bremridge's very clear, clever, and concise arguments against any unfair interference with the spirit and intention of the Pharmacy Acts, 1852 and 1868, which have been copied in other civilised countries throughout the world for the regulation of the practice of pharmacy, and have proved satisfactory. I shall be pleased indeed to have the advantage of receiving half-a-dozen copies from you to forward to M.P.'s when the time for action arrives.

Yours very truly,

JOHN GIBSON.

January 4.

(Divisional Secretary for Hexham)

[We still have copies of the article in hand. Divisional secretaries and secretaries of local associations, especially, should see to this matter.—EDITOR.]

The Mandate and the Man.

SIR,—Your article under the above heading reminds me that prior to Mr. Lord Gifford's election to a seat on the Council I took some interest in his candidature, and very naturally I carefully read your criticisms and opinions. You did not then seem to have a very high opinion of Mr. Gifford—in fact, I gather from your tone that his principles were not such as to command sufficient support to enable him to secure a seat. If those whose expectations in Mr. Lord Gifford have not been realised are only the voters you influenced in his favour, then it is consoling to know that there are so few disappointed ones. As far as I am concerned, and also many who supported Mr. Gifford, his proceedings have been quite what we expected. Since the draft Bill met with its temporary check the discovery of dangerous ground has made light stepping very necessary, and those who "rush in where angels fear to tread" are not members of the Pharmaceutical Council. You may have expected Mr. Gifford to play to the gallery, but there is no gallery—we are all in the pit—and the stage chloroform of the Chair is part of the show. At some time or another you may have advanced the interests of some successful candidate, and of him I might say "Tu quaque," which would be darkly mysterious enough to be piquant. The last sentence in your article is also mysterious, so many people are under the impression that even men of leisure could not accept a seat on the Council as an honour pure and simple, but accepted grave responsibilities and arduous duties in the conservation and promotion of the interests of all who are legitimately engaged in pharmacy. But this may be mere sentiment. In any case I cannot see that Mr. Gifford's responsibilities are greater than those of any other member of the Council. I believe that every member of the Pharmaceutical Council recognises the importance of the trust reposed in him. There are in pharmacy, as in everything else, different views as to the methods by which the interests of the community can be furthered, with probably a little more accentuation in pharmacy of the prevailing principle that what is best for one's self must be best for his fellows. From a local association to a seat on the Council is such a change of environment that it has often been remarked that the attitude of the man has changed. The realisation of a clearly defined responsibility is not conducive, in a man of sense, to rash or impetuous action. Each member of the Council must feel that he is in a tangle of harbed wire—a maze of conflicting interests—the representative of an incoherent class utterly devoid of unity of

purpose and unable to logically or consistently express its views as to a practical policy. From personal experience I believe the formation of local associations to be the best means of educating the electors towards definite and unanimous opinions which may be of guidance to their representatives. I recognise the mischief that may be done by such associations if not properly conducted, but the good they do largely counterbalances the little harm they are capable of. I can quite understand an anti-vaccinator condemning local associations. On political questions local associations have a good work before them in educating chemists towards concentration of ideas and unity of purpose. Their tendency is to dispel rather than promulgate the fallacies and inconsistencies which have largely accounted for the Council's past policy being frequently one of masterly inactivity—a policy which, under the circumstances, is much to be commended.

Batley, January 7.

R. BROADHEAD.

SIR,—It is amusing to see that Mr. R. Lord Gifford, after a period of repose, is now trying to "wake London up." Certainly noise accompanied work when Mr. R. Lord Gifford was trying for a seat on the Council. He had my vote, and I shall not regret it if he will only keep up the noise. The same reason which Mr. R. Lord Gifford has advanced against the formation of a Metropolitan association might also be advanced against the formation of the Local Associations in the Parliamentary divisions. In each case you will only get a few men to take any active part in the meetings, because the rank-and-file cannot leave their businesses. Mr. R. Lord Gifford will, no doubt, agree with me that it is unwise and illegal for a chemist to leave his shop in the charge of unqualified assistants, and this is the crux of the whole matter. The rank-and-file will not attend these meetings because they do not employ qualified assistants, and consequently cannot leave their businesses, but, with a conscientious and praiseworthy devotion to duty, have to stick to their work almost night and day. In my own town of nearly 40,000 inhabitants there are only two chemists who employ qualified men. There are thousands of chemists who are in this way tied to their businesses, and it is on this account that the provincial meetings inaugurated by the Pharmaceutical Society have been so badly attended by the chemists in the surrounding districts. Mr. R. Lord Gifford must not mistake this non-attendance and inactivity for indifference. It is not everyone that is in the fortunate position of Mr. R. Lord Gifford, who can leave his business and his interests at any time, safely guarded by a qualified assistant.

Yours truly,

M. P. S. (110/30.)

The London Chemists' Association.

SIR,—"Xrayser" evidently has conjured up in his brain a London chemists' society so formidably large and powerful that he cannot divest his mind of fear of its mighty influence. But upon what? I ask. May his dream, however, be realised. He does not answer my letter, except to say that he will take my advice and wait to hear the "defined purpose" of the Society to be formed. But he goes on to say my "rebukes . . . compel him to repeat" that "to resolve on creating a society first, and to discover some purpose afterwards, is not the usual process." Also he wishes to "tender the tip to the committee" that we shall not get our "fellow-pharmacists" to agree to any one thing that may be proposed. This is not very complimentary to the trade generally. Either "Xrayser" thinks the committee are a set of dolts, or our fellow-pharmacists are always opposed to one another. I also am compelled to repeat and say again that "Xrayser" is talking about that of which he knows nothing. To create a society first and to discover a purpose for it afterwards is like "Xrayser's" other assertion and charge against the committee—viz., having a scheme without a defined purpose. Both are absurd and ridiculous statements. He has kindly given the "tip" to the committee that pharmacists cannot agree; perhaps he will give us the "tip" as to the "usual process." I would remind "Xrayser" that microbes are not killed with cold water, and dirty water they revel in. As "Xrayser" condescended to say that he would take my advice, let me offer another word—viz., do not write again till you are in possession of the whole matter of facts. Adieu, "Xrayser"! I wish you a prosperous year.

68 Fleet Street, E.C., January 4.

GEO. W. POND.

Pure Otto of Rose.

Referring to Mr. F. M. Holmes's paper on this subject and the discussion thereon (*C. & D.*, December 14, 1901, page 966) a Bulgarian correspondent writes:—General and sweeping statements are often made abroad that every Bulgarian grower and exporter is a sophisticator. They are as false as they are ridiculous. Because there are some growers and some exporters who do adulterate their ottos this does not mean that every grower and every exporter is a sophisticator. There are as many honest and straightforward people in Bulgaria as in any country in the world. It is also very erroneous to suppose that it is difficult to procure nowadays absolutely pure otto of rose—all that a dealer or consumer has to do is to ask and pay for pure otto and he will surely get it. If a dealer, or a speculator, or a consumer is willing to pay for the otto he buys or uses only 15s. or 15s. 6d. or 16s. or 16s. 6d. per oz. when the price of pure otto in the producing market is as high as 17s. per oz., it is only too natural that what he buys cannot be pure. Otto-of-rose brands, whether sold as "virgin otto" or "extra fine otto" or "golden otto," or "absolutely pure otto," whenever offered and sold in the consuming markets 10 or 15 per cent. below the producing market's price, are bound to be doctored. Let it be also well remembered that it is no advantage to buy or use cheap grades. Every time a consumer uses a put-up grade, it is he who pays for the sophistication. The way to stop all sophistication is to do away with all demand for cheap grades. On the other hand, all consumers of high-standing otto know well that many thousands of ounces of pure otto are annually exported from Bulgaria. This fact is known best to those essential and artificial oil manufacturers and dealers who, for special private ends of their own, twice every year preach and proclaim to the world at large that all Bulgarian otto-of-rose growers and exporters have "elastic consciences," and that no pure otto is produced in or exported from Bulgaria.

The Proprietary-medicine Trade.

Mr. Morgan W. James (Llanely) again writes on this matter. The suggestions which he put forward in *THE CHEMIST AND DRUGGIST* in November and December last appear not to have received the support necessary to carry out his plan. He now suggests a "plain and simple scheme"—viz., to attack two of the most popular patent medicines at a time. He would begin with Williams's Pink Pills and Mother Seigel's Syrup, and refuse to stock or sell them until the proprietors guarantee a fair profit. He commends this idea to all patent-medicine licensees.

Liability of Labels.

SIR,—As a few days ago I submitted some labels and two counter-bills to the Board of Inland Revenue, and received them back marked "Liable" or "Not liable." I will with your permission pass on the information. I was told by two or three friends that labels specifying that the preparation is for more than one thing were liable. To test this I sent "Gout and Rheumatic Mixture," with dose, also "Head and Stomach Pills." Both returned as "Not liable." I heard of one chemist who was told officially that "Head, Stomach, and Liver" pills were "liable," but I cannot see how the word "and liver" can turn "not liable" into "liable." The next label was "Children's Cough-mixture." After the dose came the words "When cough is troublesome." The label was returned with the words in inverted commas crossed out, and label marked "Not liable with these words erased." I also sent "Neuralgic mixture." On the label occurs the words "Sells morning, noon, and night." This label was returned marked "Liable," so I suppose those words are the offending ones, no explanation being given. I have another label that says "Sells all the year round," which is, I suppose, liable for the same reason. I have a label too that has the words "Till the desired effect is produced." This, I take it, is liable as well. I asked them to say if anything in the bill sent made either of the preparations referred to "liable." Their reply is as follows: "I am to add that price-lists and matter of that character cannot be marked." It is very evident that chemists who issue handbills referring to unstamped articles will have to

be much more careful than they have been in wording them. Trusting this may be a little guide to other chemists,

Yours faithfully,

Forest Lane, Stratford.

J. E. EASTMAN.

What is Opodeldoc?

SIR,—There appears to be a prevailing misunderstanding in many shops that when opodeldoc is asked for, linimentum opii should be supplied. I find this error very common with new assistants—especially if they have been reared in the North of Scotland; and I have occasional complaints from customers that what they had before was “dark-coloured,” showing evidently that they had been supplied with the opium preparation. I presume there is no doubt that linimentum saponis should be given when opodeldoc is asked for, and it would lead to uniformity were it always supplied.

M. (41/02.)

[The sale of opium-liniment for “opodeldoc” is peculiar, we believe, to parts of Scotland. True opodeldoc is an ammoniated soap-liniment, and on the Continent is always supplied. Soap-liniment without ammonia has come to be regarded in this country as “opodeldoc,” and is generally supplied.—EDITOR.]

“Pick-me-ups.”

SIR,—I am a good deal puzzled by the contemptuous notice that you have seen fit to give of the *Daily Mail* article on “pick-me-ups.” Most of us who have had a West-end experience could probably write an article twice as long, only much less able. The remarkable thing is, that the writer steers entirely clear of those pitfalls which beset the layman who touches on physic; as far as I remember, this is the first article of the kind I have ever read in the public press that did not “come a cropper.” I notice that you do not attempt to controvert any of the statements put forward in the article, and, indeed, I do not see how they can seriously be questioned. The concluding words of the article, to the effect that self-drugging is spoiling the tradition of sound English health, are surely a very timely warning; and I should have thought that facts so correct and conclusions so sound could have received nothing but praise from you.

I am, &c.,

Gorleston, January 7.

R. H. E. BAYLES.

Legal Queries.

Before sending in a query for reply in this section see if the subject is not dealt with in “The Chemists’ and Druggists’ Diary”—Trade Law or Pharmacy Law Sections.

106/28. *G. J.*—A month’s notice on either side is the recognised custom of the drug-trade.

109/23. *E. E. R.*—Your envelope for tender-foot powder will not render the article liable to stamp-duty.

107/24. *A. T.*—See THE CHEMISTS’ AND DRUGGISTS’ DIARY for 1902, page 285, for all particulars in regard to the registration of trade-marks.

105/58. *E. B. P.*—The line on your spirit of sal volatile label, “For medicinal use in flatulence, &c.” is, we think, an implied recommendation. You should submit this label, and also the “antiseptic powder” label, to the Board of Inland Revenue for opinion. There is nothing on the other labels to render the preparations liable to stamp-duty.

107/19. *C. H. O.*—The Board of Inland Revenue is not required to state its reasons for any of its decisions, but we presume that the reason for striking out the passage in your handbill is that it is an implied recommendation of an article for curing throat-affections and intermittent fevers. That may or may not be applicable to your eucalyptus dentifrice, but in any case it would be wise to strike out the passage, as the Board appears to suggest.

110/68. *Bollo.*—If the antiseptic preparations are not to be applied externally or internally [to or in the human body] as medicines for the prevention of small-pox, your description of them will not involve stamp-duty.

110/43. *J.*—None of the labels involve liability, except the first two, but if the medicines in these cases are aqueous

solutions of simple drugs (consisting of the drug and water only) they are treated like entire drugs. We advise you, however, to send samples of these two preparations to the Board of Inland Revenue, labelled as sold, with a full statement regarding their composition. It is always advisable to do this in the case of aqueous solutions of entire drugs.

111/3. *Conder.*—The common notion that a medical practitioner’s certificate is necessary before a death can be registered is wrong, and it is perfectly correct to say that a registrar of deaths may accept certificates of death from any person, but only deaths which are certified by medical practitioners are returned as “certified.” It is the duty of the coroner to inquire into the causes of deaths which are not certified by medical practitioners, and there would be no “loop-hole to the law” if registrars and coroners were legally brought into complete touch with each other.

111/2. *Dentist.*—Your questions do not cover the ground properly. If you are a registered dental student and the pupil of a registered dentist you may assist your master in all dental operations without bringing him into trouble with the General Medical Council. But if, as we surmise, the dentist is an employé of the company of which you are a director he may, if the facts are ascertained and communicated to the General Medical Council, be charged with covering you, and his connection with the company may be considered infamous conduct. Such a case has not yet to our knowledge arisen. The calendar is not likely to implicate the dentist, as his name does not appear on it, and companies are not amenable to the Medical Council’s supervision.

110/54. *Inquirer.*—(1) An unqualified drug-store keeper using the title “wholesale and retail druggist” infringes the Pharmacy Act. (2) Your influenza-mixture requires a stamp, because the label says it is “a most reliable remedy for the above complaint.”

112/15. *W. J.*—Such titles as “Lotion for the Eyes” always render preparations liable to medicine-stamp duty. See the article in our DIARY, page 281, second column.

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

87/31. *St. Ivian.*—“Polode stone” we take to be lodestone, for which magnetic oxide of iron is supplied when required as a domestic medicine.

91/31. *G. W. W.*—Filter the discoloured brandy through kaolin or add to it some shredded gelatin. The colour is derived from the wood of the cask in which it has been stored.

95/19. *S. G.*—Antiseptic Inhalation—One of the best and most useful in bronchitis is the St. Mary’s Hospital formula:—

Ol. eucalypti ...	...	...	...	3j.
Ol. pini sylv. ...	...	...	...	3j.
Tr. benz. co. ...	...	...	...	3j.

3j. to be added to 1 pint of hot water, and the vapour inhaled.

96/28. *J. W. E.*—The liquid you send used for cleaning off old varnish before applying a fresh coat is amyl acetate.

96/74. *J. H. C.*—Kidney and Back-ache Mixture:—

Potass. acetatis ...	...	...	...	3ss.
Potass. nitratis ...	...	...	...	3j.
Spt. juniperis ...	...	...	...	3j.
Succ. scoparii ...	...	...	...	3j.
Aq. camph. ad ...	...	...	...	3vj.

3ss. bis vel ter in die.

94/30. *Lobelia.*—The tincture of lobelia made with spirit would need to be indicated as “simp.” or “B.P. 1885” in prescriptions written after the publication of the 1898 Pharmacopœia.

250/4. *Nonex.*—We do not undertake analyses.

62/23. *Elixir.*—(1) Elixir Sodii Cacodylatis is made of the strength of 1 gr. in 1 dr. It is difficult to cover the flavour of the cacodylate, but vanilla and tincture of cardamoms answer fairly well, and peppermint, as given on page 237 of the DIARY for 1902. (2) Suprarenal Solution for ophthalmic purposes is made by triturating 20 gr. of the dried extract in $\frac{1}{2}$ oz. of water and filtering through cotton-wool. It is best made fresh, but glycerin is a good preservative.

93/59. *Menthol.*—The formula given in the DIARY (page 288) for compound menthol snuff is good for nasal catarrh.

82/28. *T. P.*—The sample of sauce owes its flavour to garlic and shallots, the latter being present in about the proportion of 2 oz. to the gallon. Your sauce is too mild for the popular taste, and needs the addition of cayenne. There are several suggestive formulas in the chapter on sauces in "Pharmaceutical Formulas."

101/25. *Alpha.*—The good Lotion for Cuts and Flesh-wounds is composed as follows:—

Ac. borici	...	...	...	...	5ij.
Glyc. ac. carbolic	...	...	...	...	5iv.
Tr. lavand. co.	...	...	...	...	5iv.
Aquam ad	...	...	...	...	Oj.

M.

103/37. *Phono.*—We cannot at present supplement the information on Sound-recorders given in the *C. & D.*, November 30, page 899. The broken cylinder you send does not contain any suspended matter.

102/58. *W. A.*—Violet-perfume.—See *C. & D.*, December 28, page 1049.

102/55. *L. E. T.*—Mr. Lionel Laurence, official instructor of the Spectacle-makers' Company, 326 Birkbeck Bank Chambers, Holborn, W.C., has correspondence classes for preparing for the S.M.C. examination. Local classes are also held where the demand justifies them.

101/36. *Pandya* (India).—(1) Frank Edel's "How to Make Tablets," which we supply at 1s., is the only book published on the subject. (2) The DIARY Buyers' Guide will give you the name of a maker of tablet-machinery.

98/43. *W. G. G.* (New Zealand).—We can give no further information about the instrument for the deaf, but may be able to do so in the near future.

101/38. *Junior.*—We do not supply formulæ in imitation of proprietary medicines.

65/38. *Danois* (N.S.W.).—(1) The formulæ for photographic-developers in the CHEMIST AND DRUGGIST DIARIES for 1900 and 1902 will supply you with the quantities of accelerator for the various developing agents. (2) We are inquiring. (3) Estimation of Strophanthin.—See *C. & D.*, June 8, 1901, page 920. (4) Perfume-formulæ.—See "Pharmaceutical Formulas," and past vols. of the *C. & D.*

95/73. *Hypo.*—(1) Ung. Resorcin.—There is no recognised official or official strength for this, but a 20 per-cent. ointment made with vaseline is used in eczema and psoriasis. (2) The art of bottling liquids, particularly those of an oily nature, is not to soil the neck of the bottle. Taking this precaution, and using good corks, the paper slips over the cork will remain grease-free. (3) We are inquiring.

104/3. *F. P.*—Book on Medical Electricity.—Jones's "Medical Electricity," 10s. 6d. (Lewiss).

103/43. *G. C. C.*—Water is the best solvent for argol, but the solubility is comparatively slight.

104/67. *C. H.* (Brussels).—The pamphlet on the shellac-industry by Dr. George Watt and Mr. David Hooper may be obtained from Messrs. Sampson, Low & Co. (Limited), Fetter Lane, London, who are agents for the *Agricultural Ledger*.

104/55. *D. E. D.*—The precipitation in the solution for Easton's syrup is quinine phosphate, which is apt to separate in cold weather. A comparatively small proportion of crystallised quinine salt separating from a solution gives it an appearance of solidity.

110/36. *Nomen.*—The reference for the developer formula should have been THE CHEMISTS' AND DRUGGISTS' DIARY, 1900, page 267.

103/31. *S. D.*—Iridescent Gelatin.—We cannot say how the iridescence on the sample of gelatin you send is produced, but similar effects are produced as follows:—Make a 10-per-cent. solution of Judea bitumen in benzine, to which a few drops of oil of lavender, oil of spikenard, or oil of turpentine have been added. A little resin or dammar gum is sometimes added. A few drops of this solution dropped on the surface of water forms interference coloured pellicles. The sheet of paper or gelatin to be ornamented is placed in a tank, fitted with means of drawing off water from the bottom, which is filled with water. On the top of the water a few drops of the bitumen-solution is placed, and the water drawn off, leaving the coloured pellicle on the paper or gelatin, to which it adheres after the solvent has evaporated. In the case of bitumen, the deposit becomes insoluble on exposure to light, but various spirit-soluble aniline dyes appear to be used for producing like iridescent appearances.

108/20. *M. Q.*—The reason you cannot concentrate the metol-quinol developer is because of the comparatively sparingly soluble metol. If sodium sulphite is added to a saturated metol solution one or other is thrown out.

107/31. *L. S. S.*—Red diminium, or dominican, is derived from emplastrum de minio, "P.L." 1618 (red-lead plaster). Black and brown diminium has a similar derivation, and is applied to emplastrum fuscum vel nigrum, a plaster made by heating minium, olive oil, and yellow wax together till a blackish-brown colour is obtained, and adding camphor.

257/30. *Anxious.*—Mist. ferri co. cum dec. aloes co. is a perfectly safe mixture for sale as Female Mixture. Potassium permanganate is too disagreeable to give in mixture-form.

103/29. *Crinale.*—Hair-curling Fluid:—

Potass. carbonat.	...	...	...	...	5j.
Liq. ammoniac	...	...	...	...	5ss.
Glycerini	...	...	...	...	5ij.
Spt. rectificat.	...	...	...	...	5vj.
Aq. rosæ ad	...	...	...	...	5viij.

M.

109/65. *Daturine.*—Please say what the "admixture" is used for, and its source.

272/28. *J. P.*—The nearest English rendering of "tale-qualè" that we can give you is "take it as it comes."

108/54. *J. B.*—A very common preparation, sold under the name of essence of peppermint, is made by dissolving 1 part of the oil in 7 of rectified spirit. It would be perfectly legal to sell this preparation now, as spirit of peppermint is no longer official.

Information Wanted.

Postcard replies to any of the subjoined inquiries will be esteemed.

112/51. Makers of "Colloid" drug-bottles.

115/9. Present address of the Curic Company.

113/20. Cocoa-shells for anæmia; where obtainable?

111/47. Makers of "Popular hair-frizz" in 1d. packets.

107/63. Where can Matthew's nail-trimmers be obtained?

24/30. Present address of the makers of Denaeyer's peptones?

111/69. Who are the makers of Newton Morison's linseed-linctus?

112/21. Makers of or dealers in "Cornish stone," as used by brickmakers.

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C.: January 9.

BUSINESS has been seriously resumed this week, and although there is no great amount of activity as yet the markets have a steady undertone. The principal change of the week has been a substantial reduction in carbonate and citrate of lithia, due to "outside" competition from the United States. Morphine is a shade easier again. Further advances have taken place in pilocarpine and eserine, owing to scarcity of the raw material. Saffron comes higher from Spain, and for ergot lower offers would be accepted. Quicksilver has been slightly reduced, but mercurials are unaltered. Quinine is practically unchanged, but very little business has transpired. Cocoa-butter was slightly dearer at auction, and at the isinglass-sales a flat tone prevailed. The following are the principal changes of the week, including those recorded at the drug auctions:—

Higher	Firmer	Easier	Lower
Ammonia sulphate	Oil, pepper-mint (Jap. dem.)	Balsam Tolu Croton seed Ipecacuanha	Buchu Cardamoms Elemi Ergot Isinglass Lathia and salts Morphine Oil, cassia Quicksilver Saltpetre (Bengal) Senna (Tiny.)
Cascarilla			
Cocoa butter			
Eserine			
Pilocarpine			
Saffron			
Soda nitrate			
Wax, bees' (Jamaica)			

Arrivals.

The following drugs, &c., have arrived at the principal ports of the United Kingdom from January 2 to 8 inclusive:—Aniseed, 35; arrowroot (St. V.), 228 brls.; asafoetida (Marseilles), 311; "bbeans" (Hamburg), 7; benzoin (Penang), 35; (Singapore), 38; bismuth (Queensland), 55; calumba (Hamburg), 11; camphor (Kobe), 300 cs.; camphor oil, 10; cardamoms, 179; caraway-seed, 33; castor oil, (Fr.) 50 brls., (Calcutta) 222 cs.; castorum, 1; chamomiles, 10; chillies (Jap.), 102; cinchona, (E.I.) 137, (Ceylon) 91, (South America) 57; cocaine, crude, (Callao), 11 cs.; cod-liver oil, 268; dragon's-blood (Singapore), 13 cs.; essential oils, (Hong-Kong) 50 cs., (Messina) 287 pkgs., (Catania) 8 pkgs., (Palermo) 109 pkgs.; eucalyptus oil (Aust.), 8; gambier (cubes), 79; gamboge (Singapore), 6; gentian, 88; gum oilbannum, 235 cs.; honey (Jam.), 47; lime-juice (W.I.), 24 pns. 367 brls.; menthol (Japan), 30, and 10 in tr.; nux vomica, 95; oil, lime, 67 cs.; opium, (Marseilles) 128, (Constantinople) 53, (Calcutta) 25; otto of roses (Constantinople), 1 cs.; peppermint oil, (Yokohama) 30 cs., (Hamburg) 20; pot. chlor. (Antwerp), 40; quicksilver, (Ital.) 100, (Labau) 315; rose oil (E.I.), 19 pots; saccarin (Boulogne), 27; sarsaparilla (Kingston), 2; scammony-root, 10 bgs.; senna, (Suez) 60, (Bombay) 128; shellac, 663; button-lac, 239; sulphur (Catania), 2,021 pkgs.; tamarinds (Antigua), 35 brls.; tonka-beans (Para), 14 cs.; wax, bees' (Natal) 26, (Chil.) 12; wax, ceresin (Dusseldorf), 33 bgs.; wax, Japanese, 65.

The Year's Foreign Trade.

The Board of Trade returns for December, issued this week, complete the figures for the twelve months. The imports during the year show a decrease of 836,177l., on a total of 522,238,986l., and the exports also exhibit a decrease of 10,693,107l., on a total

of 280,498,889l. Of this ten million decrease in exports, raw materials (chiefly coal) is responsible for eight and a half millions, which is satisfactory. Altogether the figures for the opening year of the new century show that it was a fairly good one considering the adverse conditions.

Bulgarian Otto-of-Rose Market.

Our correspondent in Bulgaria, under date of December 29, 1901, writes as follows:—The Bulgarian otto-of-rose market for the crop of 1901 is now closed. The remaining dozen villages, which still held their ottos in the hope of getting a higher price later in the season, sold their produce within the last fortnight, and Rahmanlari, the last remaining village in the county of Karlovo, has just sold its otto. Of course, there are in almost every village two or three independent growers who will not part with their otto unless paid 4 to 5 per cent. above the highest price of the season. Likewise most of the jobbers are still holding their stock. They, too, sell their otto last, and only when paid 4 to 5 per cent. above the best price. This remaining stock (in all about 12,000 T. oz.), is hardly marketable before the prospects of the coming rose-crop are pretty certainly known.

As was reported in your issue of September 7, 1901, the opening prices of this year's crop were settled unusually late—about the middle of August—and they ranged from 16s. to 17s. 4d. per T. oz., according to the freezing-point of separate lot. These prices, with very slight variations, were maintained well throughout the whole buying season. During the brisk and heavy buying in September and October, there actually was a rise of about 5 per cent. in the price, and some choice lots realised as high a price as 18s. per T. oz., but that was foreseen and inevitable. Even during this month, which virtually closes the buying season, some very fine ottos were bought at this price. The average price of this year's entire crop, however, comes to about 16s. 9d. The quality of the crop was on the whole very fine, the average freezing-point being 66°-30° F., nearly one and a half degrees above previous crops.

London Markets.

ACID, CITRIC.—Quiet, at 1s. 0½d. to 1s. 1d. per lb.

ACID, TARTARIC, is unchanged, at 11¼d. to 11½d. per lb. for English and 10½d. for foreign.

ALMONDS.—From Sicily, under date of December 31, it is reported that prices have advanced still further, owing to a sudden and unexpected demand at the close of the export-season. Market has since become quieter, but there is no prospect of prices receding to former low limits. Choice Avola are quoted 86s. 3d., current ditto 62s. 6d. per cwt. of 50½ kilos, f.o.b.

ARROWROOT.—At auction on Wednesday Bermuda was bought in at 1s. 6d. per lb., and Natal at 6½d. Good St. Vincent partly sold at 2½d., but fine was bought in at 4½d. per lb.

CINCHONA.—The auctions to be held in Amsterdam on January 23 will consist of 4,904 bales and 307 cases (weighing 496,985 kilos). A supplementary catalogue will be published. The stock in first hands at Amsterdam on December 31, 1901, consisted of 2,748 packages Government bark and 10,352 packages private bark. At the drug-auction 58 bales false Calisaya bark sold at from 4½d. to 8½d. per lb., 24 serons Huanoco quill at 5½d. to 6½d. and 26 serons Loxa quill at 1s. 4d. per lb. Calisaya quill sold at 1s. 2d. to 1s. 8d. per lb.

COCOA-BUTTER was slightly dearer in auction, 70 tons Cadbury's selling at 1s. 0½d. to 1s. 0¾d., closing at 1s. 0¾d. per lb. The result of the auction held in Amsterdam on Wednesday is as follows:—Eighty-five tons Van Houten's sold at 70½c. to 71½c., average price 70½d., against 69c. previous auction; 22½ tons "De Jong" sold at 69c. to 69½c.; 1 ton "Helm" sold at 68½c.; 4 tons "Betke" sold at 68½c. to 68¾c.; 7 tons "Mignon" bought in at 69c. per half-kilo.

ESERINE.—Another 1s. per gramme has been added to the price, owing to the continued scarcity of raw material. Makers now quote 5s. per gramme for the sulphate and salicylate salts, and 6s. per gramme for the pure alkaloid, with the usual reduction for 10 and 50 grammes.

INSECT-FLOWERS.—The stocks in Trieste at the end of December, 1901, amounted to 160,400 kilos., the receipts to 19,800 kilos., and the deliveries to 40,300 kilos. The following prices are quoted, f.o.b. Trieste:—"Open" flowers, 68s. to 74s. per cwt.; half-open, 88s. to 110s.; closed, 116s. to 127s.; and wild, 131s. to 145s.

LIQUORICE-ROOT.—Clean Persian in cut lengths is quoted 12s. per cwt. nominally, and in ordinary rough root some quantity has been disposed of at about 7s. 6d.

LITHIA.—The makers have lowered their quotation for carbonate to 6s. 3d. per lb. for 2-cwt. quantities, which is a reduction of 4s. 5d.; 1-cwt. lots are quoted 6s. 4d.; 23 lb. lots, 6s. 5d.; and smaller wholesale quantities, 6s. 8d. per lb. The prices for citrate and other salts have not yet been fixed. It is reported that competition from the United States is responsible for the decline.

MORPHINE is 1d. easier at 4s. 5d. per oz. net, in contract lots.

OIL, CASTOR.—French of first pressings in cases is quoted 33s. per cwt., c i f., and Italian medicinal at 33s. 6d. Belgian firsts is quoted 26s. 6d., spot.

OIL, COD-LIVER.—The Bergen market remains very firm but unaltered at 69s. per barrel, f.o.b. The stocks of non-congealing oil are almost exhausted. During the last few days a small business has been done in new unrefined oil, which, when refined, will probably realise 2s. or 3s. more per barrel than the year-old oil. It is, however, still too early to say anything definitely about the quality and the oil-value of the new fish.

OIL, OLIVE.—From Messina it is reported that the home demand continues very strong. The new oil is eagerly bought for consumption in the large Italian towns, as the quality is excellent. Prices have advanced, and would have risen still further were it not for the large crop in Spain, which country is underselling Italy abroad, and prevents the "bulls" operating.

OIL, PEPPERMINT, is tending firmer, and for spot parcels 4s. 3d. is now asked for Japanese dementholised. For forward delivery there has been a fair business. American HGH is quoted 9s. to 9s. 3d., H & P 8s. to 8s. 3d.; JBH "first premium" 7s. 9d., and "pure" 7s. 3d. per lb. spot.

OIL, SASSAFRAS.—Genuine is quoted 1s. 7d. to 1s. 8½d. per lb., according to quality.

OIL, SPEARMINT, is offered at 6s. 3d. per lb. spot.

OIL, WINTERGREEN, is quoted 6s. 3d. per lb. spot.

ORRIS.—Good Florentine sorts are obtainable on the spot at about 29s. per cwt.

PILOCARPINE.—The continued scarcity of genuine jaborandi-leaves has led to an advance of 6s. per oz., the quotations ranging from 3s. per gramme to 70s. per oz., according to quantity.

QUICKSILVER.—On Monday the importers reduced quotation 2s. 6d. per bottle, now 8l. 15s. Mercurials are unaltered. We have received the following statement from Mr. Alexr. S. Pickering:—

	Imports Bottles	Exports Bottles	Highest £ s. d.	Lowest £ s. d.
1901 ...	35,341	23,833	9 2 6	8 17 6
1900 ...	32,725	25,869	9 12 6	9 2 6
1899 ...	51,696	34,239	9 12 6	7 15 0
1898 ...	54,563	31,014	7 15 0	6 16 0
1897 ...	51,731	30,763	7 7 6	6 9 6
1896 ...	47,159	35,211	7 6 0	6 5 6
1895 ...	49,654	36,827	7 8 6	6 7 6
1894 ...	51,251	43,598	6 14 0	5 7 0
1893 ...	52,525	38,022	6 17 0	6 2 0
1892 ...	56,990	50,211	7 13 0	6 1 0

The estimated consumption in United Kingdom is 13,000 bottles per annum.

QUININE has been very quiet, with a small business at 1s. 1½d. per oz. for spot; March delivery is quoted 1s. 1¼d. The exports of "quinine, quinine-preparations, &c., from Germany during the ten months ended October amounted to:—

	1901	1900	1899
Kilos. ...	169,900	155,100	172,100

SHELLAC.—There has been a fair demand for spot, and full rates have been paid, including second orange T.N. on a basis of 124s. for cash. A moderate business has also been done in futures, comprising January delivery at 125s., March 127s., and May 128s. 6d. to 129s. per cwt.

SODA NITRATE is dearer, refined now being quoted 9s. 10½d. and ordinary 9s. 9d. per cwt.

SPICES.—The public auctions were resumed on Wednesday, but only a small proportion of the quantity offered was sold. There was no demand for Cochin ginger, and it was nearly all bought in; washed rough at 52s. per cwt., bold rough at 55s., small rough at 45s., Calicut brown rough at 48s., "B" cut at 75s., and "C" cut at 65s. A few cases of medium and small native cut sold at 57s. Japan was bought in at 42s. per cwt. for ordinary rough limited. A small lot of African sold at 35s. Jamaica was bought in above the biddings. Zanzibar *Claves* sold at 3½d. to 4d. per lb. for good quality, but landed damp and packages stained. The quotation on the spot for fair is 4½d., and for March-May delivery 4¼d. per lb., being lower. Fine picked Penang were bought in at 1s. 1d. per lb. Fair red stalky Zanzibar *Chillies* were bought in at 35s. per cwt. The bulk of the *Capsicums* offered was withdrawn, but a few lots sold; fine picked Egyptian at 45s. to 46s. per cwt. and bright East India pods at 22s. *Pimento* was slow, and very little sold; common at 3¼d. and good at 3¾d. per lb. *Cinnamon* sold at 9d. per lb. for pieces, and at 6d. to 6½d. for featherings; quillings being bought in at 9d., and chips at 3¼d. per lb. *Cassia-chips* partly sold at 43s. per cwt. *Cassia vera* was bought in at 25s., and *Chini-Cinnamon* at 28s. per cwt. *Black Pepper* is steady; light Penang was bought in at 5½d. per lb. Singapore is quoted 6½d. per lb. on the spot, and 6¾d. to arrive. White is firm at 9½d. for Singapore, and 9¾d. for Penang on the spot.

SULPHUR.—From Messina under date of December 31 a firmer market is reported, some qualities showing a slight advance. This was contrary to expectation, as prices usually recede towards the end of the year, owing to the efforts of the holders of large deposits at the shipping places endeavouring to effect a favourable settlement of their yearly accounts with mine owners in the interior. This year, however no such settlements have taken place, as practically the entire available stocks are controlled by the Anglo-Sicilian Sulphur Company. The statistical position is decidedly unfavourable, however. During October-November there was a decrease in the exports of about 20,000 tons compared with last year, and stocks still keep about 60,000 tons in excess, in spite of a temporary diminution of receipts in November owing to heavy floods. Current thirds which had been neglected for a long time, all at once came into favour. Tests of this quality vary considerably from 87 to 91 per cent. according to the different warehouses. The Anglo-Sicilian Sulphur Company immediately advanced their price about 3s.—unwisely it is thought, as they hold a large stock of this quality. The trade complains of unsteadiness of purpose on the part of the monopoly, who only a fortnight ago refused to purchase back their own warrants, thereby imparting a disheartening tone to the market, and then, without giving notice, considerably raised their price for one special quality, just for the pleasure of making some in cautious shipper pay the difference on a few hundred tons. At Catania, the Socialist Deputy De Felice is forming a trust of the refiners with the assistance of the Government, and also of the Anglo-Sicilian Company; he will probably be successful. The following are the quotations:—Best unmixed seconds, 84s. 9d.; best thirds, 74s.; current thirds, 70s. 9d.; refined block sulphur, 83s. 6d. per ton of 13 Sicil. cantars f.o.b.; refined roll sulphur in 3 cwt. casks, 95s. 6d.; sublimed flowers in bags, 103s. 3d.; current ditto, 94s. 3d. per ton of 20 cwt. f.o.b. Freights are again stiffening.

London Drug-auctions.

ALTHOUGH eighteen brokers offered goods to day, the auctions were concluded at about 2 P.M. owing to the dull tone; the tendency of prices was lower. Cardamoms dropped 3d., buchu-leaves were easier, and there was a substantial decline in elemi. Balsam tolu sold steadily in large quantities, croton-seeds were easier, as was also Rio and Cartagena ipecac. Tinnevely senna was easier, and rhubarb was in fair demand at unchanged rates. The following table shows the amount of goods offered and sold:—

Offered		Sold		Offered		Sold	
Aconite ...	20	...	0	Ambergris.....	15	...	2
Ajowan-seed ...	20	...	0	Ammoniacum ...	24	...	1
Albumen	16	...	0	Annatto seed ...	98	...	0
Aloes—				Areca.....	36	...	0
Cape	3	...	2	Asphaltum	31	...	0
Socotrine	23	...	0	Balsam copaiba ..	13	...	1
Zanzibar	21	...	1	Peru	5	...	1*

* Sold privately.

	Offered	Sold		Offered	Sold
Balsam Tolu	119	96	Musk	10	5
Benzoin—			Myrrh	43	20
Palembang	117	57	Nutmeg-paste	1	0
Siam	2	0	Oil—		
Sumatra	179	42	anise, star	10	0
Buchu	37	4	cassia	20	20
Calabar-beans	10	0	castor (E.I.)	137	0
Calumba	322	2	cajuput	10	0
Canella alba	35	0	cedar-wood	5	0
Cannabis indica	66	0	chaulmoogra	8	0
Cardamoms	424	167	cinnamon	12	0
Cascara sagrada	130	0	cod-liver (Jap.)	50	0
Cascarilla	4	2	(Nor.)	9	5*
Cassia fistula	6	6	encalyptus	118	0
Castorum	1	0	lemongrass (Java)	13	0
“Chaulmoogra- seed”	25	0	lime (W.I.)	26	1
Chillies	10	0	nutmeg	7	0
Chiretta	25	0	orange	6	0
Cinchona	139	121	peppermint	42	0
Civet	3	0	rosc (E.I.)	24	2
Colocynth	23	1	sassafras	5	0
Coca-leaves	47	18	wintergreen	1	0
Condurango	7	0	ylang-ylang	2	1
Cowhage	2	2*	Orange-peel	27	1*
Croton-seed	39	4	Orris (E.I.)	7	0
Cubebs	172	0	Patchouli-leaves	5	0
Cus-cus	14	1*	Pistachio	2	0
Cuttlefish-bone	51	11	Purce	3	0
Dill seed	40	0	Quillaia-bark	50	0
Dragon's-blood	6	1	Rhubarb	74	23
Elemi	15	5	Safflower-seed	2	0
Ergot	20	3	Sandalwood	48	0
Galbanum	9	0	Sarsaparilla	52	6
Galls	30	10	Scammonium	16	0
Galangal	22	22	Scammony-root	65	0
Gamboge	11	5	Senega	19	0
Guaiacum	3	0	Senna—		
Gum acacia	41	10*	Alexandrian	49	3
Cativo	5	0	Tinnevely	427	397
chicle	1	0	Squills	15	4
grass-tree	84	0	Storax	11	0
Honey—			Tamarinds (E.I.)	66	0
Australian	70	0	(W.I.)	25	7*
Californian	50	0	Tonka beans	7	1
Honolulu	46	10*	Tragacanth	8	3
Jamaica	98	14	Turmeric	107	0
Ipecacuanha—			Turpentine	1	0
Cartagena	102	3	Vermilion	2	0
Rio	75	7	Wax (bees)—		
Irish Moss	2	0	Australian	23	1
Jalap	10	0	Cuban	4	4
Kamala	7	0	East Indian	104	0
Kino	38	0	Italian	4	0
Kola	59	2	Jamaica	21	18
Lime-juice	1	0	Morocco	2	0
Liquorice-root	94	0	Zanzibar	187	68
Mastic	11	0	Wax (Carnauba)	12	0
Matico	11	0	(Japanese)	50	0
Menthhol	8	0	Yellowberries	38	0

* Sold privately.

ALOES.—Of Cape only three cases were shown, two of which sold at 38s. per cwt. for good seconds. Zanzibar aloes in skins was in large supply and neglected; 41s. was paid for one case of hard livery. Socotrine in kegs was held at 75s.

AMBERGRIS.—Fine lump did not sell. For two tins of black “undeveloped” of fair flavour 15s. to 20s. per oz. subject was paid.

ARECA.—Slightly wormy seed were held at 45s. per cwt.

BALSAM COPAIBA.—For cloudy Maranh 2s. 4d. was the price.

BALSAM PERU.—Thin balsam was held at 6s. 3d. per lb. A case has been sold privately.

BALSAM TOLU.—In large supply and in good demand at steady prices. For a string of 23 cases good hard in large tins 11d. to 11½d. was paid “without reserve”; and 83 cases, part rather soft, but good balsam, sold at 1s.; and slightly drossy at 11d. per lb. For 17 cases of small tins good hard reddish balsam 1s. 4d. was wanted.

BENZON.—Quiet in auction. Of Sumatra, 9 cases of good alomdy seconds sold at 8d.; and for 8 cases not quite so good 7d. subject to 7d. 10s. was paid. Twenty-two cases of

medium seconds, with small almonds, sold at 5l. 17s. 6d. to 6l. For good glassy Palembang 45s. was refused; and for 57 cases very low ditto in large block, imported in 1900, 10s. to 12s. per cwt. was paid without reserve.

BUCHU-LEAVES were slightly easier, a few bales selling at from 8½d. to 9d. per lb. for fair round greenish leaf.

CALABAR BEANS.—For a parcel previously offered 1s. 6d. was wanted.

CARDAMOMS met with a decline of from 1d. to 3d. on heavy offerings, the following rates being paid:—Ceylon-Mysore, bold pale bright, 2s. 9d., subject; bold, rather dull open, 2s. 9d.; bold medium palish, 2s. to 2s. 5d.; small and medium pale, 1s. 8d. to 1s. 9d.; small pale, 1s. 4d. to 1s. 6d.; small split, 1s. 4d. to 1s. 5d.; brown and split, 1s. 3d. to 1s. 5d. A pile of 48 cases very small, dull unsorted Mysore and Malabars sold at 1s. 3d. to 1s. 4d. Seeds sold at steady prices, 2s. 4d. to 2s. 5d. being paid for good, down to 1s. 9d. per lb. Eight cases of native wild description sold at 2s. 10d. to 3s. for good bold; and 1s. 10d. for medium.

CASCARILLA.—For fine medium to bold silvery quill a bid of 67s. 6d. per cwt. was refused, 70s. being wanted; for 2 bales lean and twiggy bark 55s. was paid, being dearer.

CASSIA FISTULA.—Good long pod from Dominica realised 28s. per cwt.

COCA-LEAVES.—Fine bright Ceylon sold at 1s. 2d., and dullish and broken ditto at 1s. to 1s. 1d. per lb.

COLOCYNTH.—Yellowish Spanish pulped sold at 1s. per lb.

CROTON-SEED.—For good bright 45s. was the limit from Colombo, but no offer was made; 4 bags of ordinary, mostly dark mixed seed, sold at 15s. per cwt., subject.

CUS-CUS.—Three lots, amounting to 14 bales, sold cheaply at 10s. 6d. per cwt., subject, for fair clean.

CUTTLE-FISH BONE.—Fair white Bombay bone sold at 3½d. per lb.

DRAGONS'-BLOOD remains scarce, and for a case of medium lump 10l. 12s. 6d. was paid.

ELEMI.—About 20s. per cwt. cheaper, 5l. to 5l. 5s. being paid for 5 cases fine white gum from Manila.

ERGOT is tending lower. From Hamburg Spanish is quoted 1s. 4d. per lb., c.i.f., but little or no business has been done. In auction several small parcels of Spanish sold at 1s. 9d. per lb., being unchanged. Two bags of Russian wheat ergot were held at 1s. 6d.

GALANGAL sold without reserve at 10s. to 11s. per cwt.

GALLS.—Ten cases Chinese sold at 57s. 6d. per cwt., subject.

GAMBOGE.—Still very scarce. For good partly blocky pipe, with mostly orange fracture, 12l. was paid.

GUM AMMONIACUM.—One case of dark block and siftings sold at 15s. per cwt.

HONEY.—Slow of sale. Of a parcel of 43 cases Honolulu honey 10 had been sold privately at 20s. per cwt., but no bid was made for the remainder. Ten barrels brown-set Jamaica sold at 17s., and 3 cases thick brown at 18s.

IPECACUANHA.—There is now a stock of 1,046 packages in the warehouse, consisting of 563 bales Rio, and 443 Cartagena. The deliveries during December amounted to 55 bales of both kinds, or 23 packages less than in November. In auction prices of both Rio and Cartagena were slightly easier these being very little demand. Five bales of Rio sold at 10s. 3d. per lb. for lean to fair, and 1 bale at 10s. 6d., being cheaper. Several bags of Cartagena sold at 4s. 8d. per lb. for dusty red and mixed root: good clean and bold was held at 5s. 6d.

MUSK.—For 4 caddies of old-fashioned untrimmed pod, part skinny and damp, 41s. 6d. to 44s. per oz. was paid; small and medium thin skin grey, slightly damp, but of fair flavour, were bought in at 60s.

MYRRH.—Seventeen bags good bright Aden sorts sold at 75s. per cwt., and for 2 cases bold pickings 50s. was paid; a case of siftings sold at 40s. per cwt.

OIL, CASSIA.—Twenty cases, containing 82 per cent. c.a. (according to Parry's analysis) sold at 2s. 10d. per lb., “without reserve,” being cheaper.

OIL, EUCALYPTUS.—A large supply was offered, but no business was done. Magnet brand (63 to 70 per cent. cineol) was limited at 1s. per lb.

OIL, LEMONGRASS.—For Java description 7d. per oz. was wanted.

OIL, YLANG-YLANG.—One bottle of "Manila oil" sold without reserve at 2s. 6d. per oz.

RHUBARB sold at steady rates. Of Canton, 1 case of fine medium and bold flat, rather spongy, sold at 1s. 3d., and small and medium ditto at 10d. per lb. Of 16 cases small to bold fine flat High-dried, with good coat and pinky fracture, 2 cases sold at 9d., showing no change. Nine cases of High-dried, slightly wormy, sold "without reserve" at 6d. per lb.; and 7 cases of bright rough round native ditto, of good fracture, sold at 6½d.; and for 2 cases ditto, with darker fracture, 5½d. was paid. For medium round Shensi a bid of 2s. 8d. was to be submitted. This lot was afterwards sold privately.

SARSAPARILLA.—For grey Jamaica, which is scarce, 1s. 4d. was refused, 1s. 8d. being the limit for the best lot; 17 bales Lima-Jamaica were held at 1s. 4d., and Guatemala at 8d. per lb. Six bales native Jamaica sold at from 4d. up to 10d. per lb., the latter figure being paid for good red.

SENNA.—Quality was mostly of low grades, which sold at about ½d. per lb. easier prices, but for what little fine leaf offered high rates were paid. Good bold greenish Tinnevely leaf (1 bale) sold at 10d., fair bold greenish ditto 2½d. to 3½d., and ordinary small and medium 1½d. to 2d., with common and yellowish, part badly sea-damaged, at from ½d. to 1½d. per lb. Pods sold at from ¾d. to 2d. per lb. Three bales of Alexandrian pods sold at 7d.

TONKA-BEANS.—A box of fair, part foxy Para sold at 1s. 5d. per lb.

WAX BEES.—Jamaica was about 2s. 6d. dearer, good quality selling at from 8d. to 8d. 2s. 6d., and fair at 7d. 17s. 6d. per cwt. Four packages Cuban sold at 6d. 10s. for fair to dark brown, and a bale of good greyish mixed Australian sold at 6d. 15s. Zanzibar sold at from 6d. 10s. to 6d. 12s. 6d. for good, and 6d. to 6d. 2s. 6d. per cwt. for wormy. Madagascar was not offered.

Cablegrams.

SMYRNA, January 9:—Market is steady, the sales from Wednesday amounting to 100 cases at from 8s. to 8s. 2d. per lb. Sellers are very tenacious.

HAMBURG, January 9:—Refined camphor is firm; the tone in shellac has improved; and borax-refiners have refused to make contracts at present prices.

NEW YORK, January 9:—Business here is dull. Opium is quiet, at \$3.05 per lb. Quinine is steady, at 27c. per oz. The following have an easier tendency: Senega, at 51c.; hydrastis, 50c.; buchu, 20c.; and ergot of rye, 40c. per lb.

Heavy Chemicals.

There is rather more activity in the heavy-chemical market now, and business is steadily settling down to more normal proportions. General demand, both on home and export account, is about an average one, and values all round are fairly well maintained.

ALKALI PRODUCE.—Caustic soda in steady request: 76 to 77 per cent., 10l. 7s. 6d. to 10l. 15s. per ton; 70 per cent., 9l. 15s. to 10l. 2s. 6d. per ton; and 60 per cent., 8l. 15s. to 9l. 2s. 6d. per ton. Bleaching-powder moving well, at from 6l. 10s. to 6l. 15s. per ton for softwood casks, free on rails. Ammonia alkali, 58 per cent., in brisk demand and firm, at 4l. 12s. 6d. to 4l. 17s. 6d. per ton, free on rails in bags. Soda crystals steady, at 62s. 6d. per ton f.o.b. Tyne, and 67s. 6d. per ton f.o.b. Liverpool.

SULPHATE OF AMMONIA.—Beckton, 11l. 7s. 6d. for January to June; Beckton terms, 11l. 2s. 6d.; London, 11l. 5s.; Leith, 11l. 2s. 6d. to 11l. 3s. 9d.; and Hull, 11l. to 11l. 1s. 3d. Exports from Leith last week amounted to 809 tons.

LINSEED AND COTTON-SEED CAKES in good all-round demand, with values steady and well maintained. Linseed cakes, 95 per cent. pure, 8l. 7s. 6d. to 8l. 12s. 6d. per ton. Oil-cakes, 7l. 7s. 6d. to 7l. 12s. 6d. per ton. Cotton-seed cakes, firsts, 4l. 15s. to 4l. 17s. 6d. per ton; and seconds, 4l. 10s. to 4l. 12s. 6d. per ton.

SOUTH DURHAM SALT continues to move fairly well, at unchanged rate of 11s. per ton, f.o.b. Tees.

BICHROMATES OF POTASH AND SODA.—Quiet. Potash, English and Scotch deliveries, 3d. per lb., less 4 per cent. Glasgow. For export, 4d. per lb. less and net. Soda for English and Scotch deliveries, 2½d. per lb., less 4 per cent. Glasgow. For export, net figures ¼d. per lb. less.

GREEN COPPERAS keeps in active demand, and prices are firm, with advancing tendency. Best Lancashire makes, 42s. 6d. to 45s. per ton, f.o.b. Liverpool. Welsh, 13s. 6d. to 15s. per ton, in bulk, free on rails.

Liverpool Drug Market.

Liverpool, January 8.

CASTOR OIL.—The depression in Calcutta good seconds and first and second pressure French continues. For the first named grade 3½d. per lb. is asked by holders, although this figure might be slightly shaded for quantity. First-pressure French is held for 3d., and second-pressure 2½d. For forward delivery slightly easier quotations are given.

CALABAR BEANS.—A further arrival has taken place, and the parcel will be offered at auction.

GRAINS OF PARADISE.—At auction 10 bags were offered, and were sold at prices ranging from 60s. to 65s. per cwt., and now holders are again asking 70s.

ACACIA SORTS.—Business in Soudan descriptions continues good, as several parcels have changed hands at slightly better prices than those prevailing last week. Hard amber description is worth 36s. to 40s. per cwt.; soft Soudan sorts, 42s. 6d. to 46s. per cwt., according to quality.

CANARY-SEED is again moving off, and 200 bags have been sold at 39s. per quarter.

ARSENIC.—Again dearer, and 15l. 10s. per ton is now asked.

SULPHATE OF COPPER.—In much better demand, and 19l. 5s. to 20l. per ton is asked by makers.

BEESWAX.—At auction 7l. per cwt. was bid for 20 bags of mixed grey to yellow Chilian, but 7l. 5s. was asked; 2 tons Chilian were sold at 7l.; 8 ballets of Sierra Leone African were sold at 6l. 6s. 3d. For Peruvian at auction 7l. 5s. was asked.

LINSEED OIL.—Liverpool makes, in export casks, are held for 30s. to 31s. per cwt., according to quality. There is a steady demand at these prices.

TURPS is very firmly held at a better price—namely, 23s. per cwt. There is a moderate trade passing.

TONKA BEANS.—The first arrival of Para for a considerable period was offered at auction, and for the 8 cases 1s. 6½d. was asked, but the parcel sold at slightly under this figure.

German Drug-market.

Hamburg, January 7.

Business in general is quiet here, but an improvement is soon expected.

AGAR AGAR is steady, at 395m. to 400m. per 100 kilos.

ANISEED is steady, new crop being quoted 40m., and old crop at 38m. per 100 kilos.

BALSAM PERU is very firm, at 13m. per 100 kilos.

CITRIC ACID is tending firmer, at 237m. per 100 kilos.

CONDURANGO is dearer, 75m. per 100 kilos. being now asked.

CAMPHOR (REFINED) is tending firmer, second-hand holders asking 433m. per 100 kilos.

ERGOT is unchanged, with Spanish quoted 345m. and Russian 340m. per 100 kilos.

IPECACUANHA (RIO) is also unchanged, at 24½m. per kilo., while Carthagenia is quiet, at 12½m. per kilo.

JALAP is quiet, at 110m. per 100 kilos.

MENTHOL unchanged, at 30½m. per kilo., spot.

QUININE is quiet, at 39m. per kilo.

SENEGA is lower, at 480m. per 100 kilos.

JAPANESE WAX is quiet, at 66½m. per 100 kilos.

OILS (FIXED).—Cod-liver is unchanged, with non-congealing oil quoted 66m. to 68m. per barrel. Castor, quiet and neglected; linseed advancing.

OILS (ESSENTIAL).—Russian anise oil is quoted 12½m. per kilo.; star-anise oil is quiet, at 10½m. per kilo.; peppermint oil is very firm, at 8½m. per lb. for HGH, and 8½m. per kilo. for Japanese.

Borax-mining in U.S.A.

The Stauffer Chemical Company has recently purchased the Frazier Borax Mine in Kern County, and is preparing for extensive mining this winter. Beginning with January the company will ship 150 tons per month.

A Camphor-cargo Wrecked.

A dispatch received at New York on December 17 states that the British barque *Sindia* bound from Kobe to New York went ashore near Ocean City, N.J., and has since become a total wreck. Her cargo (says the *New York Commercial*) included 300,000 lbs. of crude camphor upon which American refiners were depending for fresh supplies. In consequence the refined article has advanced to 57c. in barrels, and 57½c. in cases.

Sulphate of Copper for Greece.

The American Consul at Patras telegraphed to his Government, on December 9, that the Greek Currant Bank is about to purchase 500 tons sulphate of copper, and asks for bids for this quantity. In our issue of July 13, 1901, it was noted that in consequence of the great increase in phylloxera in Greece, sulphate of copper has become an important article of importation, the present yearly consumption being estimated at from 7,000 to 8,000 tons. The principal importers are the banks and syndicates who control the Greek currant trade. In 1900, the Currant Bank of Greece imported 2,000 tons.

Indian Government Cinchona and Quinine.

The Budget estimates of the Madras Cinchona-department for 1902-1903 anticipate a further increase in the demand for quinine, and the estimate of receipts has accordingly been raised to 210,000r., or 19,600r. more than the estimate of expenditure for the year. In accordance with a Government order passed on March 10, 1893, the Government, instead of extending its own plantations and competing with private industry, purchases the surplus bark it requires from cinchona-planters at a price per unit which is annually fixed. Provision has been made in the Budget for working up 474,000 lbs. of bark during the coming year to meet the increased demand, and for the purchase of 200,000 lbs. of 3½ per cent. of bark at 2d. per unit.

London Drug Statistics.

THE following statistics are compiled from information supplied by public warehouses. They relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses for the month of December, 1901, and to the stocks on December 31.

	December		Stocks		1901	
	Landed	Delivd.	1901	1900	Imp'd.	Delivd.
Aloes cs, &c.	391	3 3	1,417	3,055	1,313	1,893
" gourds	—	—	146	1,034	—	888
Anise, star cs	—	—	13	48	11	46
Balaams cs, &c.	24	93	6 5	425	1,580	1,160
Cambura bgs.	13	103	1,663	936	2,678	1,721
Campbor pkgs	274	850	633	3,837	7,534	10,680
Cardamoms cs, &c.	777	217	1,912	2,194	3,735	4,006
Cinchona pkgs	1,657	1,961	10,298	9,621	24,591	23,824
Cochineal bzs.	44	95	1,095	2,246	601	1,751
Oubeba cs	64	9	1,675	1,518	350	223
Dragons-blood cs	—	2	53	147	83	177
Galls pkgs	100	529	8,195	2,439	14,541	8,826
Gums—						
Ammoniacum ..	—	—	82	68	110	96
Animal & copal ..	4,179	2,717	22,459	10,774	52,223	40,496
Arabic ..	2,768	1,763	16,993	17,757	25,889	26,779
Asafetida ..	204	20	767	379	1,214	1,604
Benzoin ..	254	3 0	746	1,035	2,564	2,853
Damar ..	138	206	3,319	4,562	2,419	3,676
Galbanum ..	—	—	—	12	—	7
Gamboge ..	2	6	96	214	41	153
Guaiacum ..	—	—	44	33	33	43
Kauri tons	141	226	1,459	1,935	2,183	2,637
Kino pkgs	—	10	1 8	26	141	62
Mastic ..	8	2	6	6	9	9
Myrrh, E. I. ..	13	12	103	178	163	234
Olibanum ..	101	458	954	1,448	5,162	5,537
Sandarac ..	138	74	718	592	1,301	1,170
Tragacanth ..	792	879	4,230	3,543	12,070	11,343
† Jacacuanha, Rio bla	121	47	538	311	842	633
" other kinds pkgs	43	8	335	224	695	494
Jalap bla	19	16	149	331	129	311
Nux vomica pkgs	—	—	11	1,533	6 8	2,190
Oils—						
Anise cs	55	7	250	173	185	108
Castor cs	2	1	127	115	80	27
Oastor pkgs	129	104	6 0	532	2,039	2,179
Cocoa-nut tous	99	84	101	146	1,022	1,065
Olive cs, &c.	188	132	1,034	493	4,078	3,519
Palm tous	29	13	24	6	79	59
† Quinine lbs	7,281	2,317	222,312	209,782	74,710	62,180
Rhubarb chts	96	91	493	1,189	530	1,153
Sarsaparilla bla	53	68	176	153	1,237	1,214
Senna bla, &c.	644	7 6	2,490	2,628	5,964	6,002
Shellac cs	1,826	2,145	29,088	35,718	37,571	45,203
Turmeric tons	74	11	420	465	525	573
Wax, bees' pkgs	318	245	1,736	1,394	5,463	5, 65
" Japan cs, &c.	—	100	285	625	363	738

* Stocks lying at Smith's Wharf and Brewer's Quay are not included in this return.

† Includes the quantity at Red Lion, Bull, and Smith's Wharves; also the Docks.

The statistics of goods lying at City Commercial Wharf are not included in above returns.

Coming Events.

Notices of forthcoming meetings are inserted in this section free of charge. Secretaries should send such notices to the Editor of "The Chemist and Druggist," 42 Cannon Street, London, E.C., so that they may be received not later than Wednesday of the week of publication; if later, by telegram to "Chemicus London."

Monday, January 13.

Dewsbury Chemists' Association, Church House, Church Street, at 8.30 P.M. Business:—Discussion on Federation's subjects, compulsory curriculum, division of the Minor, and apprenticeship question.

Society of Arts, John Street, Adelphi, W.C., at 8 P.M. Can'tor Lecture—Dr. Samuel Rideal on "The Purification and Sterilisation of Water" (I.).

Tuesday, January 14.

Bradford Chemists' Association. Discussion on a proposed drug and dispensing price list.

Wednesday, January 15.

Pharmaceutical Society of Great Britain (North British Branch), 36 York Place, Edinburgh. Evening meeting.

Royal Microscopical Society, 20 Hanover Square, W., at 8 P.M. Annual Address by the President.

Chemists' Ball at the Whitehall Rooms, Hôtel Métropole. Tickets may be had from Mr. F. W. Hill, 160 Earl's Court Road, S.W.

Thursday, January 16.

Glasgow and West of Scotland Pharmaceutical Association. Social evening at the Cockburn Hotel, 141 Bath Street, Glasgow. Tickets, 7s. 6d. (double), 5s. (single), may be had from Mr. T. Dunlop (Hon. Secretary), Albert Cross, Pollok-shields, Glasgow.

Chemical Society, Burlington House, Piccadilly, W., at 8 P.M. Papers: "Myricetin" (Part II.), by Mr. A. G. Perkin; "The Colouring-matters of Green Ebony," by Messrs. A. G. Perkin and S. H. C. Briggs; "An Investigation of the Radioactive Emanation produced by Thorium Compounds" (I.), by Messrs. E. Rutherford and F. Soddy.

Midland Pharmaceutical Association, Birmingham, at 8.45 P.M. Mr. F. H. Alcock, F.I.C., on "Cinchona-bark: Its Tincture and Assay."

Edinburgh Chemists', Assistants', and Apprentices' Association, 36 York Place, Edinburgh, at 9.15 P.M. Communications by Messrs. D. Harley and J. Hutcheon.

Friday, January 17.

Royal Institution of Great Britain, Albemarle Street, Piccadilly, W., at 9 P.M. "Interference of Sound," by Lord Rayleigh. The bust of Sir Frederick Bramwell, presented to the Institution by subscription, will be unveiled by the Duke of Northumberland.

THE Junior Pharmacy Ball will be held on February 26. Mr. P. Trick, Salisbury House, London Wall, E.C., has accepted the position of Hon. Sec.

THE annual dinner of the London College of Chemistry will be held in the Venetian Chamber, Holborn Restaurant, on January 29. Mr. Percy M. Thornton, M.P., will take the chair and present the prizes.

THE Chemists' and Druggists' annual musical evening will be held on January 28, in the Whitehall Buildings, Belfast. A good programme is being provided, and a large attendance is expected. Mr. James Tate, M.C.P.S.I., will preside.

IN addition to the usual classes for botany, materia medica, and pharmacy at the Technical Institute, Belfast, the new class for druggists will begin on Monday evening, January 13. Fee for the course of thirteen lectures, 5s.

FIRE.—On January 7 a destructive fire broke out in Aberdeen, involving the stores of Messrs. William Paterson & Sons, wholesale druggists and manufacturing chemists, Spring Garden. Fortunately, the offices and part of Messrs. Paterson's factory were saved, so that business will be continued without interruption, although considerable inconvenience will be caused in getting out orders already booked. Mr. A. R. Horne, manager, and Mr. David Ross, chemist to the firm, were on the scene during the progress of the fire, and these gentlemen estimate the loss at about 10,000/.

Pharmaceutical Society of Ireland.

COUNCIL-MEETING.

ON Wednesday, January 1, the Council met at 67 Lower Mount Street, Dublin, at 3 P.M. The President (Mr. George Beggs) occupied the chair, and the other members of the Council who attended were: the Vice-President (Mr. Bernard), and Messrs. Grindley (Hon. Treasurer), Smith, Baxter, J.P. (Coleraine), T. N. Moffitt (Belfast), Batt, and Kelly. The PRESIDENT wished his colleagues all happiness and prosperity during the year.

THE VISITOR'S REPORT.

The REGISTRAR (Mr. Ferrall) read the following report of the Lord Lieutenant's visitor, Sir George Duffey, M.D., on the Society's examinations held during 1901:—

PRELIMINARY.

This examination was held, as usual, quarterly. Ninety-four candidates—an increase of twelve over the number in 1900—presented themselves for examination during the year. Forty-nine—52.1 per cent.—passed, and forty-five—47.8 per cent.—were rejected. Last year [1900] the percentage of rejections was 36.5. The high rate of rejections during the present year has been exceeded only once previously—viz., in 1899, when it was 48.1 per cent. The subject in which the largest number of candidates failed was arithmetic. Thirty-eight of the forty-five rejected candidates failed in this subject—thirteen of the thirty-eight showing such ignorance as to be marked 0. Fifteen candidates failed in weights and measures; fifteen also in chemistry; thirteen in English; thirteen in Latin; nine in Euclid; seven in algebra; and six more on other of the optional subjects. Nine of the fifteen candidates also failed in chemistry, more marked 0. Of the 45 rejected candidates 13 failed in one subject only—viz., 8 in arithmetic; 3 in Latin; 1 in English; and 1 in chemistry. Eleven failed in two subjects; 12 in three; 5 in four; 1 in five; 2 in six; and 1 in seven. As regards the optional subjects, 49 candidates (of whom one-third only obtained the bare pass-mark—i.e., 20 per cent.) took botany; 39 selected French; and 6, physics. It is gratifying to notice that there was some improvement in the knowledge of French shown by the candidates. The examination in that language, as conducted by the present Examiner, includes a written as well as an oral examination, and is a more satisfactory test than it formerly was. Of the 94 candidates examined during the year 27 were cases of re-examination. Nineteen were examined for the second time; 11 passed, and 8 again failed. Of five examined for the third time, 3 passed and 2 failed. Of two for the fourth time, one passed and the other was rejected; and one candidate examined for the fifth time was again rejected. Thus, of the 27 candidates examined 15 passed and 12 did not. The Preliminary examinations during the year have been ably conducted by Mr. James Healy, LL.D., R.N.I., and Mr. David O'Sullivan, both of whom came into office at the January examination. The former gentleman examines in English, Euclid, arithmetic, and in French; and the latter takes the other subjects. The questions on the examination papers, which I enclose, appear to be fair and reasonable, and applicable to the age of the candidates, and the training they should necessarily have received to enable them to profit by the special instruction preparatory to their Final examination. The oral examinations were also practical and simple; and the marking for both the written and oral by no means stringent. The results of the year's examination, as given above, show, however, that the standard of preliminary general education of a large number of the candidates is lamentably low.

In my last report I again called attention to the system of marking in Latin and in English, and offered some suggestions with a view to an improvement in the examination. No change, however, as far as I know, has been made in the Preliminary examination with regard to the matters referred to, which therefore I beg respectfully to bring again under your Excellency's notice. I am strongly of opinion that the hours of examination require revision. The examination at present occupies one day only. It commenced at 11 A.M., and, with a brief interval of about three-quarters of an hour in the afternoon, is seldom concluded until after 7 P.M. These long hours are a strain upon the examiners and upon the candidates. Owing to the number of subjects and the number of candidates, the time available for the written and for the oral examination is insufficient, and the candidates are also frequently interrupted when at their written examination by being called up to an oral examination. The average time given to an oral examination is but five minutes, and for each written examination one hour only is allowed. In addition to dictation, the candidates have to write answers to examination papers in seven different subjects. The examination should extend over two days, and more time should be allotted to

the written as well as to the oral examinations, and both examinations should not be held concurrently.

THE LICENCE EXAMINATION.

Sixty-nine candidates—an increase of two over the number in 1900—presented themselves for this examination during the year. Forty (58 per cent.) passed and twenty-nine (42 per cent.) were rejected. Last year the corresponding percentages were:—Passed, 38.8 per cent.; rejected, 61.2. The figures for this year show a considerable improvement in the results of this examination, and the percentage of successful candidates is higher than it has been since 1893. Thirty-four—or almost one-half—of the sixty-nine candidates had been unsuccessful at previous examinations; twenty-one, of whom fifteen passed, were examined for the second time; four, of whom one passed, for the third time; five, of whom two passed, for the fourth time; three, of whom one passed, for the fifth time; and one, again rejected, for the sixth time. Of the twenty-nine rejected candidates twenty failed in theoretical chemistry. Two candidates only—who also failed in theoretical chemistry—did not obtain the minimum pass standard in practical chemistry. Similar results, indicative of a want of systematic instruction in the theory of chemical science, have been noted in former reports. The question of the addition to the regulations for the Licence examinations of compulsory attendance upon a course of lectures in theoretical chemistry in a recognised school of chemistry is, I understand, under consideration by the Council of the Society. Some such resolution would, in my opinion, be advisable. In the division of pharmacy twenty-one of the twenty-nine rejected candidates failed—the majority, twelve, in "compounding." An alteration which came into force at the April examination has been made in the marking in this division. The minimum total pass percentage has been raised to 50 instead of 45, and the former sub-division "prescription-reading and British Pharmacopoeia," has been divided into two distinct sub-divisions with a maximum of twenty, and a minimum of ten for each. The minimum pass percentage for compounding and for the written examination, has also been raised to 50 per cent. for each sub-division respectively. In the division of botany and materia medica, eleven failed in the former, and eight in the latter; seven of the eleven failed in both subjects. The following is an analysis of the rejections, arranged according to the three divisions of the subjects of this examination: Division 1, botany and materia medica; Division 2, chemistry; Division 3, pharmacy:—

Rejections in Division 1	...	...	...	...	1
Rejections in Division 2	...	...	...	...	4
Rejections in Division 3	...	...	...	...	6
Rejections in Divisions 1 and 2	...	...	...	...	3
Rejections in Divisions 1 and 3	...	...	...	...	2
Rejections in Divisions 2 and 3	...	...	...	...	7
Rejections in Divisions 1, 2, and 3...	...	...	...	...	6
Total rejections	...	...	...	...	29

In my report for 1899, I recommended that at the examination in botany and materia medica candidates should be tested as to their knowledge of the use of the microscope. I am pleased to state that at the April examination, for the first time, slides with sections typical of various forms of plant structure were given to the candidates to recognise under the microscope. I have the honour, &c.

GEORGE M. DUFFEY, M.D. (Visitor).

The PRESIDENT said the lamentable standard of the Preliminary examination could hardly be laid to the door of the Council. They had invariably endeavoured to make it as searching as possible. He fully agreed with Sir George Duffey that it should be extended over two days. He had attended the last fourteen or fifteen of these examinations, and had invariably found that each of them was more or less of a rush. After a young lad been planted down to his paper, and before he had finished it, he was called away to the oral examination. That more or less distracted his mind from what he had been writing. An examination extending over two days would not be a hardship on the examiners, whilst it would be a great benefit to the students. The strain of one long day would be taken off; and the examinations could be made more searching. He had himself been wearied out by merely attending there and listening to examinations that lasted sometimes up to 7.30 or 8 o'clock at night. Twenty or twenty-one students would be distributed in two rooms; and under the present arrangement the examiners could not keep the two classes going satisfactorily. The Council invariably tried to fall in with Sir George Duffey's remarks, which, as a rule, were very wholesome and just.

The VICE-PRESIDENT moved that Sir George Duffey's report be sent to the examiners for their remarks, and that it

should then go to the Law Committee. It was quite true that the procedure at the Preliminary examination required to be altered. He had been present at a good many of them; and he thought that no boy was fit to leave school who would not be fit to pass it. It was only fixed at the ordinary standard of school education. Another matter requiring consideration was the oral examination for the licence. It took place in the presence of students who were writing, but in a whispered conversation which members of the Council and licentiates who were supposed to be present could hardly hear. He had never been able to catch more than one or two of the questions. The examiners should speak loud so that those present who had a right to hear could hear.

Mr. KELLY, in seconding the motion, said the number of subjects the candidates had to answer in at the Preliminary examination was too great. They had to write answers to seven papers. He was sure that the examination was very searching, and he knew that the examiners were tip-top; but he knew also that numerous candidates who failed to pass the Society's Preliminary went to the College of Surgeons and passed at the first attempt. Their examination should be at the same standard as that of the College of Surgeons; but if the subjects were reckoned it would be found that the Society's examination exceeded that of the College in many points, and was much more searching. At the Society's Preliminary a boy was handed a book in French that he had never seen before, and was required to translate, parse, conjugate verbs, and so on; whereas the candidates for the College examination were informed beforehand of the book they would be examined in. The number of subjects at the Society's Preliminary was such that it was impossible for a boy to carry them all in his head. Theoretical chemistry was compulsory at the Preliminary now; but when students came up for the Licence examination it seemed to have faded from their memories in consequence of the number of subjects at the Preliminary.

The PRESIDENT said he was not at all for lowering the standard of examination. If the College of Surgeons' standard was not as high as theirs he did not see why the latter should be lowered. It had been thrown in the Society's face that their Preliminary examination was no test. By making it a two-day examination and affording every possible facility to students coming up to it they would be moving in the right direction; but to lower the educational standard would be wrong. Sir George Duffey's report pronounced the general educational standard of the lads that came up to their Preliminary to be lamentably low. If that were so they would not be justified in lowering the examination in order to come into line with other bodies.

Mr. SMITH said he had spoken to a number of members on the subject of the Preliminary examination, and in his opinion the number of subjects was too great. He did not know that chemistry was to be regarded as a part of general education. If the standard were kept up in English, arithmetic, Latin, and, perhaps, French, and chemistry and botany were dropped at the Preliminary, that would not be a lowering of its standard; and it would enable boys to come direct from school to the examination, which at present they could not do. They would have to pass in the other subjects at the Licence examination. The present system was not conducive to obtaining apprentices, and that was a matter that should be considered. He would not dream of lowering the general educational standard, but he would drop one or two of the subjects.

Mr. KELLY said he had not the remotest thought of lowering the standard of examination.

Mr. BAXTER said he sympathised with the views of Mr. Kelly; but at the same time he thought that if chemistry and botany were eliminated from the Preliminary a door would be opened to young men who had no intention of becoming pharmaceutical chemists, and the standard of the examination would at the same time be lowered. He concurred with the opinion that the examination should be spread over two days.

The VICE-PRESIDENT said Sir George Duffey was quite right in his statement that the standard of the English education of the students was lamentably low. He (Mr. Bernard) had had messenger boys in his employment who could have knocked some of them into fits. It ought to be

no trouble to a boy in these times to gain a knowledge of theoretical chemistry when there were so many technical schools. On the contrary, it ought to be a pleasure to the boy to learn it. When this matter should come before the committee they should have before them the papers of the students who had passed, and of those who were rejected, and then they would see what they would think of them. He had seen some spelling that was absolutely hideous. He saw papers for the licence, the writers of which could not spell the word "pharmacy."

The PRESIDENT: I have a son in Wesley College, and I have given instructions to the master that he is to be prepared in theoretical chemistry; and I should be very sorry that he had not the knowledge of that subject and of botany that is required for our Preliminary examination.

Mr. BAXTER said that in Coleraine special facilities exist for the teaching of those subjects.

The PRESIDENT: As to the Licence examination, Sir George Duffey spoke very strongly in favour of having theoretical chemistry a compulsory subject. We tried to make it compulsory, but the Privy Council would not sanction it. I think we have now a strong point in our favour when we send back this report with our remarks to the Privy Council—namely, that their own visitor wishes to have the theoretical class compulsory at the Final.

The motion of the Vice-President was then unanimously agreed to.

A letter was read from Mrs. Porter, returning thanks to the Council for their letter of condolence on the occasion of the death of her husband, late member of the Council.

A letter was received from Mr. W. V. Johnston, resigning the office of examiner for the Pharmaceutical-Assistantship qualification, and offering himself for election as a member of Council.

VICE-PRESIDENT: I am entirely opposed to bartering. Is this a contingent resignation?

Mr. GRINDLEY: No.

PRESIDENT: It is a clear, plain resignation. He is now out of office altogether.

VICE-PRESIDENT: If we accept it we should accept it with regret; but I want to know it on an understanding that he is to be elected on the Council.

The PRESIDENT: Not to my knowledge.

The resignation was accepted.

A letter was received from the principal of the Municipal Technical Institution of Belfast stating that one hundred hours' practical work in chemistry was fully provided for in the day and evening courses of their chemistry department.

The Registrar was directed to write back asking were a hundred hours given in the evening as well as the morning class.

A letter was received from Mr. R. Blair, member of the Council, stating that Mr. E. A. O'Keefe, headmaster of the Crawford Municipal Institute, Cork, had given him a guarantee that the course of chemistry for pharmaceutical students would be one of 120 hours' practical work in the laboratory.

The VICE-PRESIDENT: They should be informed that we wish the course to be completed within six months.

The Registrar was directed to reply accordingly.

CURRICULUM OF CHEMISTRY.

On the motion of Mr. SMITH, seconded by Mr. KELLY, the following new regulation was adopted and ordered to be transmitted to the Privy Council for approval:—

That on and after January 1, 1903, all candidates for the Licence must produce evidence of having attended a course of elementary chemistry extending over a period of three months, such course to consist of at least three hours' lectures per week in a school recognised by the Council; that the students must attend at least three-fourths of the lectures; and that the course shall be taken out before that in practical chemistry.

NEW MEMBERS.

On the motion of the PRESIDENT, seconded by the VICE-PRESIDENT, Mr. A. T. Bennett, Bagnalstown, Ireland; Mr. J. McMurray, Belfast; and Mr. F. C. Warren, Glasbill, King's County, Ireland, were elected members of the Society.

The Council then adjourned.

Elementary Dispensing-practice.

By JOSEPH INCE.

EMULSIONS—(continued).

ALKALINE emulsions are the least troublesome to make; they are not stable preparations, but on the slightest shake they return immediately to the emulsion state. They are made in a bottle, with the exception of balsam of copaiba and viscid liquids. Some make an alkaline emulsion of the balsam by previously smearing the inside of the bottle with mucilage.

(1)

R	Ol. amygdal. ...	...	...	...	5j.
	Liq. potassæ ...	...	...	...	℥xxx.
	Syrup. aromat. ...	...	...	...	3ss.
	Aq. destillat. ad ...	...	...	...	5j.

Into a phial put the alkali, diluted with 30 minims of water to equal the oil in bulk; add the oil gradually, each time with the gentlest shake. The water is added by degrees, reserving sufficient to dilute the syrup, which add last.

(2)

R	Ol. amygdal. ...	...	...	...	5iss.
	Liq. sodæ ...	...	...	...	3ss.
	Tinct. scillæ ...	...	...	...	℥xv.
	Aq. destillat. ad ...	...	...	...	5j.

Bring the liq. sodæ up to an equal bulk with the oil by the addition of aquæ 3ss., and proceed as in No. 1. Tincture, diluted, to be added last.

(3)

R	Ol. amygdal. ...	...	...	...	5j.
	Potass. subcarb. ...	...	...	...	gr. x.
	Aq. destillat. ad ...	...	...	...	5j.

Dissolve the alkali in 1 dr. of water to equal the oil in bulk. Proceed as before.

In these three cases, and in all similar alkaline emulsions, the alkali is increased in bulk in order that it may completely surround and coat the oil. These emulsions frequently contain a fixed and an essential oil. Mix the two together, and there is no further trouble.

The plan of emulsifying each separately is an unnecessary proceeding.

(4)

R	Ol. amygdal. ...	...	...	...	5j.
	Liq. potassæ ...	...	...	...	℥viii.
	Ol. carui ...	...	...	...	℥j.
	Aquæ destillatæ ad ...	...	...	...	5j.

Mix the caraway and almond oils, dilute the liquor potassæ up to 5j. and dispense as usual.

(5)

R	Bals. copaibæ ...	...	...	...	5j.
	Mucilag. acaciæ ...	...	...	...	5ij.
	Liq. potassæ ...	...	...	...	℥x.
	Tinct. lavand. co. ...	...	...	...	℥v.
	Spt. æther. nitros. ...	...	...	...	℥x.
	Aq. destillat. ad ...	...	...	...	3iss.

Put the whole of the mucilage in a mortar, and add the copaiba by degrees, alternately with a few drops of water. Dilute the potash up to 1 dr., and by its addition complete the emulsification. Water up to 1 oz.; tincture and nitre last, diluted in remaining water. There are other methods. Borax may be included among alkaline emulsions, of which, indeed, it is a beautiful illustration:—

(6)

R	Pulv. sodii bborat. ...	...	...	...	9j.
	Ol. amygdal. ...	...	...	...	5j.
	Aq. destillat. ad ...	...	...	...	3iss.

Dissolve the borax in all the water: add the whole of the oil at once, and emulsify by a very gentle shake. This emulsion is upset by the addition in ever so small a quantity of syrup, glycerin, or mucilage.

Note.—Oil of almonds is specially adapted to alkaline emulsification; olive oil is far better treated otherwise.

Recent Patents.

THE following are abstracts of complete specifications recently published, of inventions for which letters patent have been granted. Money order offices sell postcards, price 8d. each, which, on filling up with the number and year of the patent and posting, secure a copy of any complete specification.

Nail-brush.—Heinrich Jacobson, apothecary, Breslau, has obtained protection for the manufacture of nail-brushes having a plate of pumice-stone screwed on the back or a strip of the same material on the side. (19,758, 1901.)

Catheter.—A. Bachein, chemist, Bad-Wildungen, Germany, has patented catheters which indicate the position of the "window" when in use. The indication is managed by means of a line, or dots, or wording (such as "this side up") running the length of the catheter. (19,285, 1901.)

Briquettes.—F. Chailly, New York, makes improved briquettes by a formula substantially as follows:—comminated combustible material, 90; plaster of Paris, 8; and dextrin or starch 2, or a soluble silicate or silicic acid $\frac{1}{2}$, or the residue of mineral oils generally called "black oils" 2. (17,863, 1901.)

Preserving Wood.—C. S. Lawrence, chemist, Plainfield, and F. McConick, Friendship, U.S.A., preserve wood by plugging holes made in it with a mixture of sodium chloride 16 parts, arsenious acid 8 parts, mercuric chloride 1 part, potassium nitrate 2 parts, and copper subacetate 1 part. (15,316, 1901.)

Another process patented by G. Feyerabendt, chemist, Tilsit, Germany, consists of cooking the wood under pressure in a solution of sodium aluminate, to which some alumina has been added. (15,402, 1901.)

Coloured Lights.—E. Oelbermann, Cologne-Ehrenfeld, produces coloured lights for illumination effects by adding certain chemicals to sodium-free wax and wicks from which the candles or night-lights are made. For red the salicylate or formate of lithium is preferred, and for green the preferable copper salt is crystallised verdigris. (19,286, 1901.)

Epileptics' Bread.—B. Hoffmann, chemist, Budapest, patents an improved flour for the use of epileptics, or those afflicted with nervous affections. Sodium bromide (1) is used with wheaten or rye flour (50), potatoes (30), and caraway-seeds (5). The last two ingredients are for increasing the palatability of the food prepared from the flour. (17,729, 1901.)

Preserving Eggs.—C. T. V. Brun, Vridsløselille, Denmark, by using albumen as in the following recipe claims to overcome the objections of existing egg-preserving processes:—

White of egg ...	...	...	...	1 part
Sodium silicate solution (cont. 35 per cent. of the soda salt) ...	...	...	...	2 parts
Water ...	...	...	...	2 parts

(17,331, 1901.)

Waterproof Leather.—R. Croasdale, Syracuse, N.Y., has invented a process of treating raw hide to make it waterproof, unacted on by atmospheric conditions, and translucent. After the preliminary cleaning process the hides are put into a bath of salicylic acid 2, picric acid 3, boric acid 25, and water 1,000 for three or four hours. Salicylic acid hardens, picric acid shrinks, and boric acid cleanses and preserves the hide. When dry the skin is sponged in a dim light with a solution of potassium bichromate $2\frac{1}{2}$, in water 100, and then exposed to light. (19,542, 1901.)

Casein in Photography.—Dr. Otto Buss, Ruschlikon, near Zürich, has patented a process of preparing a sensitive photographic surface in which casein in dilute acid solution is precipitated by a saline solution. The process is worked as follows in the case of printing-out paper. To 9 litres of water are added 800 grammes of pure milk-casein, and a solution of 250 grammes of citric acid in 1 litre of water is stirred into the heated mixture. An opalescent liquid results, to which is added 100 to 800 grammes of glycerin, and the whole filtered. This solution is used in place of gelatin or albumen in coating the paper, which is afterwards "salted" and sensitised. (22,040, 1901.)

Practical Notes and Formulae.

CREOSOTE PILLS.

E. F. KESSLER contributed a note to the A.P.A. on the manufacture of creosote pills. His method is to drop the creosote on to a small quantity of magnesia, then add a drop of water, and mass with vaseline.

OIL-COLOUR SICCATIVE.

FIVE to ten per cent. of wax is added to many oil-colours sold in tubes as a thickening-agent to prevent the heavier pigments separating. A better addition is, according to Moritz Kitt (*Analyst*, November, 1901), wood oil which has turned solid through exposure to light for a few weeks.

HOT-WATER BOTTLE SUBSTITUTE.

A SIMPLE plan suggested by a writer in the *Philadelphia Medical Journal* is to wrap an ordinary electric-light bulb in flannel and apply to the part. The lamp is connected by a long flexible connection, and when lighted gives off a steady heat very acceptable in pains of the chest and abdomen as well as neuralgic pains of the head. As long as the lamp is alight the heat continues, and does not decrease as is the case of a hot-water bottle.

CASTOR-OIL SOAP.

Mix 100 grammes castor oil with 30 grammes sulphuric acid (sp. gr. 1.847), and set aside in a cool place for two days, stirring occasionally. Then take 100 grammes of this oil, rapidly stir in 60 grammes soda solution (sp. gr. 1.345), and apply a gentle heat until the mixture becomes clear. Set aside several days to allow the sodium sulphate to crystallise out, separate the soap, and boil until it no longer froths, and a sample, on cooling, forms a clear, yellow jelly.—*Pharm. Centralt.*

STOVE-POLISHES.

I.

Selected Ceylon graphite ...	100 parts
American gas-black ...	10 parts
Acetic acid, diluted with an equal volume of water ...	2 parts

II.

Good Ceylon graphite ...	100 parts
Austrian graphite ...	50 parts
American gas-black ...	5 parts
Molasses ...	1 part
Glycerin, diluted with twice its bulk of water ...	a sufficiency

III.

Good Ceylon graphite ...	100 parts
Powdered ivory-black ...	20 parts
Copperas ...	40 parts
Glycerin, diluted with twice its bulk of water ...	a sufficiency

—*Oil and Colourman's Journal.*

THYROID PILLS.

Dried thyroid gland (corresponding to 5v. gr. viij. of the fresh gland)	5j. gr. xvij.
Sugar, in coarse powder ...	gr. xlvij.
Powdered tragacanth ...	5ss.
Powdered vegetable charcoal ...	5j.
Syrup ...	q.s.

Make into 100 pills.

—*Union Pharm.*

LECITHINE MIXTURE.

Yolk of egg ...	5x.
Milk ...	3iiss.
Glycerin ...	5x.
Cherry-laurel water ...	3iiss.
Sugar ...	3iv.
Sodium chloride ...	5iij.

A tablespoonful contains 8 gr. of lecithine, which is extracted from yolk of egg, and is distearoglycerophosphate of choline.—*Rep. de Pharm.*

STERILE LUBRICANTS.

MUCILAGINOUS lubricants for surgeons' use are in demand. The basis is prepared by boiling Iceland moss in water, glycerin and antiseptics being added. It is necessary that the lubricants should be sterile, and on this account they are usually dispensed in collapsible tubes. Before filling the tubes the inside should be coated with melted hard paraffin, so as to prevent the contents from touching the metal of the tubes. This precaution is very necessary in the case of soft soap put up in similar manner.

COOLING-CREAM.

Quince-seed ...	1 oz.
Boric acid ...	16 gr.
Starch ...	1 oz.
Glycerin ...	16 oz.
Carbolic acid ...	40 drops
Alcohol ...	12 oz.
O.l of lavender ...	40 drops
Oil of rose ...	10 drops
Extract of white rose ...	1 oz.
Water to make ...	64 oz.

Dissolve the boric acid in 30 oz. of water, and in this macerate the quince-seed for three hours, then strain. Heat the starch and glycerin together until the starch granules are all broken, and add the carbolic acid. Dissolve the oils and the extract of rose in the alcohol, and add to the quince-seed mucilage; then mix all together, strain, and add water enough to make the product weigh 64 oz.

—*Bulletin of Pharmacy.*

THE USE OF SOFT WATER.

THE *Lancet* is doubtful whether soft water is any advantage over hard water. Soap is more rapidly soluble in soft water, but the slippery feeling of the soap is less easily removed from the skin, and it is doubtful, when soap is used, whether rain-water or soft water is better for the complexion or skin than hard tap-water. It is certainly not so refreshing. In manufacturing-processes or in the wash-tub use of soap in soft water is an economy. It is said that if London were supplied with soft water the saving of soap would amount to tens of thousands of pounds per annum, and Glasgow is estimated to save 36,000*l.* annually in soap since using Loch Katrine water. That may be so, but in the matter of personal washing there is a waste of soap produced rather than an economy by using soft water. The fact that a tablet of soap disappears more quickly when rain-water is used instead of hard tap-water is proof of this assertion.

New British Coins.

NEW postage-stamps bearing the effigy of King Edward VII. were issued on January 1, and it is said that 90,000,000 of them were sold during the first two days. They are universally condemned, and although the King approved of them before they were issued, it is now stated that he has asked no more of the stamps to be issued. That may be taken *cum grano salis*. The Post Office has a big stock to get rid of, and stamp-plates take time to make. Meanwhile the new coins are awaited with eagerness. We saw a penny the other day, and the annexed engraving, which is somewhat larger than the original, is a fair representation of it. It is much happier in design than the postage-stamp. The illustration shows the obverse of the new coinage, but this will not be seen on silver for some months to come, as under a new regulation the issue of coinage in future is to depend only on the actual necessity for more coins, and it is considered that there is enough silver in circulation at present. The sovereigns and half-sovereigns will be the first to make their appearance, and they will be speedily followed by the "coppers." The silver may not be issued until the eve of the Coronation.

